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6 SUBACUTE TOXICITY OF RDX AND TNT IN DOGS.

9 FINAL REPORT,

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10 E. Ross Hart

Submitted To:

Office of Naval Research
800 N. Quincy Street
Arlington, Virginia

Contract No N00014-73-C-0162

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Submitted By:

Litton Bionetics, Inc.
5516 Nicholson Lane
Kensington, Maryland

July 19, 1974

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Litton BIONETICS

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SUBACUTE TOXICITY OF RDX AND TNT IN DOGS

Contract No. N00014-73-C-0162

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SPONSOR: Office of Naval Research DATE: July 19, 1974

MATERIAL: Cyclonite (RDX)
Trinitrotoluene (TNT)

SUBJECT: FINAL REPORT
Subacute Toxicity of RDX and TNT in Dogs
LBI Project No. 1399
Contract No. N00014-73-C-0162 Mod. #1

I. SUMMARY

Dogs given daily dosages of RDX of 0.1, 1 or 10 mg/kg/day for 90 days developed no signs of toxicity other than temporary episodes of emesis to which a tolerance apparently developed. One medium level animal died for reasons unrelated to the study.

Dogs given daily dosages of TNT of 0.02, 0.1 or 1 mg/kg/day for 90 days developed no signs of toxicity other than temporary episodes of emesis to which tolerance apparently developed.

Laboratory diagnostic procedures and both gross and microscopic postmortem examinations revealed no important differences from controls.

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II. OBJECTIVE

The objective of this study was to evaluate and characterize the toxicity of RDX and TNT when given to dogs by repeated oral administration over a 90-day period.

III. MATERIALS

RDX is the common designation for an explosive also known as Cyclonite. It bears the chemical name hexahydro-1,3,5-trinitro-s-triazine. It was supplied to Litton Bionetics for this study in the form of a pre-mix with ground dog chow containing 20 mg RDX/gm chow. The pre-mix was received at Litton Bionetics on July 3, 1973, and assigned LBI No. 698A.

TNT is the common designation for an explosive which is known chemically as trinitrotoluene. It was supplied to Litton Bionetics for this study in the form of a pre-mix with ground dog chow containing 2 mg TNT/gm chow. The pre-mix was received at Litton Bionetics on July 3, 1973, and assigned LBI No. 697A.

IV. METHODOLOGY

A. Animals and Husbandry

Forty-two (42) healthy, young, adult, purebred beagle dogs, 21 males and 21 females, were obtained from Hazleton Research Animals. They were examined by a staff veterinarian on receipt and housed in individual stainless steel cages, provided with fresh water several times daily and fed Wayne Dog Food in the form of ground meal. This same food is available in pelleted form, but the ground form was utilized in this study to facilitate admixture of the test material.

The dogs were held in quarantine in order to assure their good health and to allow incubation of any diseases which might have been present at the time

of receipt. Two sets of clinical laboratory studies were performed. These had the double purpose of demonstrating good health and of providing baseline values for comparative purposes.

B. Group Assignments

Near the end of the quarantine period, the dogs were assigned to the various treatment groups with attention to accomplishing groups balanced with respect to sex and body weight. Final assignments were as follows:

Group No.	Treatment Level	Dog No. and Sex	
		Male	Female
1	Control	65	37
		66	43
		72	45
2	RDX-High	55	49
	(10 mg/kg/day)	73	50
		74	76
3	RDX Medium	64	40
	(1 mg/kg/day)	68	41
		75	54
4	RDX-Low	59	35
	(0.1 mg/kg/day)	61	36
		67	53
5	TNT-High	69	46
	(1 mg/kg/day)	70	47
		71	48
6	TNT-Medium	60	42
	(0.1 mg/kg/day)	62	38
		63	52
7	TNT-Low	56	39
	(0.02 mg/kg/day)	57	44
		58	51

C. Diet Preparation and Administration

Preliminary trials in the sponsor's laboratory had indicated that diets containing the planned concentrations of RDX and TNT were not readily accepted by dogs. After much consideration of various alternatives, the following procedure

was agreed upon. Diluted chow mixes were prepared according to the sponsor's directions as follows:

Schedule	Compound	Pre-Mix gm	Chow gm	Final Conc. mg/gm/chow	Animal Group No.
A	RDX	Undiluted		20.0	2
B	RDX	400	3600	2.0	3
C	RDX	40	3960	0.2	4
D	TNT	Undiluted		2.0	5
E	TNT	400	3600	0.2	6
F	TNT	80	3920	0.04	7

Each day a food mixture was prepared for each individual dog. This mixture contained 0.5 gm of the appropriate diluted chow mix (see above) per kilogram of body weight and about 60 grams of a commercial (meat containing) canned dog food. The control group was given normal ground dog chow handled in the same way. After this had been consumed by the dog, dog chow was provided ad libitum for the remainder of the working day. Uneaten chow was removed at the end of normal working hours so that appetite would be good the following morning. Records were kept of test material consumed daily. Water was available at all times.

D. Observations

Each dog was observed at least once daily at the time of feeding or more often if indicated. Records were made of any deviations from normal with respect to appearance, behavior, appetite and elimination. Signs of toxic or pharmacologic effects were also recorded daily or more often. Each animal was weighed weekly.

All dogs were examined by a consultant veterinary ophthalmologist prior to group assignments and again during the 13th week of the study.

E. Laboratory Diagnostic Procedures

The following studies were performed on each animal twice during the quarantine period and again during the 4th, 8th and terminal weeks of the study.

1. Hematology

hematocrit	total leucocyte count
hemoglobin	differential leucocyte count
erythrocyte count	reticulocyte count and Heinz bodies
	RBC fragility

2. Clinical Biochemistry

fasting blood sugar	serum chloride
blood urea nitrogen	serum glutamic-pyruvic transaminase
total serum protein	methemoglobin
total serum bilirubin	serum alkaline phosphatase
serum sodium	serum glutamic-oxaloacetic transaminase
serum potassium	sulfobromophthalein liver function test

3. Urinalysis

pH	total protein
specific gravity	bilirubin
glucose	microscopic examination of sediment
ketones	urine glutamic-oxaloacetic transaminase

F. Termination

At the scheduled time for termination, the dogs were transferred to the Kensington facility of Litton Bionetics where superior facilities for necropsy exist. Each animal was killed and immediately subjected to a gross necropsy under the direction of a Board-Certified Veterinary Pathologist.

The following organs were removed and individually weighed:

heart	adrenals
kidneys	spleen
liver	testes with epididymis
thyroids	

Samples of the following tissues were taken for preservation in 10% neutral buffered formalin:

brain	gallbladder	urinary bladder
pituitary	spleen	prostate
thoracic spinal cord	kidneys	ovary
eye	adrenals	uterus
thyroids	stomach	rib junction
lung	pancreas	bone marrow
heart	small intestine	nerve with muscle
liver	mesenteric lymph node	any unusual lesions

Approximately 12 selected tissues from each animal in the control and the high dosage groups for each compound were prepared and examined for histopathologic alteration:

brain	liver	stomach
thyroid	spleen	small intestine
lung	kidney	bone marrow
heart	adrenals	lesions

V. RESULTS

A. Observations

During the first two weeks, there were scattered instances of nausea and vomiting. No single dog was affected for more than a few days and the whole matter subsided.

One dog (No. 75, male, medium level RDX) died during the fourth week. At necropsy, a lesion was found, located subcutaneously in the left flank. It was necrotic and crepitant and appeared to have originated as an abscess. There were numerous focal hemorrhages. It was the opinion of the examining pathologist that this dog died of a bacteremia derived from the lesion mentioned and unrelated to the RDX treatment.

Except for this one dog and the few emesis episodes mentioned, there were no toxic signs recorded nor were there changes in body weight beyond the expected fluctuations.

Ophthalmoscopic examination by Dr. Seth A. Koch, a board-certified veterinary ophthalmologist, revealed no changes attributable to treatment except "some increased granularity and mild hyper-reflectivity of the fundus" in high dosage groups of both RDX and TNT. This could indicate a mild inflammatory retinopathy but is not considered evidence of important toxicity.

B. Laboratory Diagnostic Procedures

There were no important changes in any of the blood cytology chemistry measures. There are low values among the blood chemistry determinations at the eight-week point, but these occurred in control animals as well as in treated ones. Thus, they probably represent laboratory variants rather than toxic effects. Similarly, urinalysis failed to reveal abnormalities.

C. Pathology

Necropsies conducted under the supervision of Walter F. Loeb, V.M.D., Ph.D., revealed nothing remarkable. The occasional abnormalities are itemized in the individual report sheets in the Appendix. Organ weights are also recorded.

The incidence of microscopic findings is tabulated as part of the signed summary also incorporated in the Appendix. It seems clear that no important toxic effects were observed. Renal microcalculi and bone marrow hemosiderosis are both encountered occasionally in random dog populations. The small group sizes, three per sex per dosage group, make it precarious to attribute importance to the incidences seen in this study.

VI. CONCLUSIONS

Dogs given daily dosages of RDX of 0.1, 1 or 10 mg/kg/day for 90 days developed no signs of toxicity other than temporary episodes of emesis to which a tolerance apparently developed. One medium level animal died for reasons unrelated to the study.

Dogs given daily dosages of TNT of 0.02, 0.1 or 1 mg/kg/day for 90 days developed no signs of toxicity other than temporary episodes of emesis to which tolerance apparently developed.

Laboratory diagnostic procedures and both gross and microscopic post-mortem examinations revealed no important differences from controls.

Submitted by: E. Ross Hart

E. ROSS HART, Ph.D.
Director, Department of
Pharmacology and Toxicology

ERH:pp

LITTON BIONETICS, INC.

TABLE 1

BODY WEIGHT
(kilograms)

DOG NO. AND SEX	PRE-DRUG	WEEKS OF DRUG ADMINISTRATION 1	2	3	4	5	6	7	8	9	10	11	12	13	TERM-INAL
CONTROL															
65 (M)	7.9	8.1	7.8	8.1	7.8	8.2	7.8	7.8	8.0	8.0	7.8	7.4	7.8	8.0	8.0
66 (M)	8.5	8.7	8.6	8.8	8.9	8.4	8.4	9.0	8.9	8.6	8.8	8.4	8.5	8.6	8.6
72 (M)	8.2	8.5	8.2	8.5	8.5	8.8	8.8	8.4	8.6	8.2	8.2	8.4	8.3	8.0	8.0
MEAN	8.2	8.4	8.2	8.5	8.4	8.5	8.3	8.4	8.5	8.3	8.3	8.1	8.2	8.2	8.2
37 (F)	8.1	8.2	7.9	8.2	7.8	8.4	8.4	8.2	8.2	8.4	7.6	7.6	7.8	7.8	7.8
43 (F)	7.5	7.8	7.4	7.7	7.8	8.6	8.6	8.2	8.4	8.2	8.0	7.8	7.6	7.8	7.8
45 (F)	8.7	8.4	8.1	8.6	8.5	8.6	8.6	8.8	9.4	8.6	8.4	8.2	8.4	8.6	8.6
MEAN	8.1	8.1	7.8	8.2	8.0	8.5	8.5	8.4	8.7	8.4	8.0	7.9	7.9	8.1	8.1

LITTON BIONETICS, INC.

TABLE 1 (continued)

BODY WEIGHT
(kilograms)

DOG NO. AND SEX	PRE-DRUG	WEEKS OF DRUG ADMINISTRATION 1	2	3	4	5	6	7	8	9	10	11	12	13	TERM-INAL
RDX - 10 mg/kg															
55 (M)	10.7	9.6	9.2	9.8	10.2	9.6	9.6	10.4	9.2	9.8	10.2	9.8	10.0	10.6	10.6
73 (M)	10.6	9.8	10.0	10.1	10.4	10.0	9.0	10.6	9.2	10.6	10.8	10.6	10.5	10.4	10.4
74 (M)	9.3	8.6	8.6	8.9	9.4	8.8	8.8	9.2	9.6	9.6	10.2	9.6	9.9	10.4	10.4
MEAN	10.4	9.3	9.3	9.6	10.0	9.5	9.1	10.1	9.3	10.0	10.4	10.0	10.1	10.5	10.5
49 (F)	8.7	8.8	8.3	8.6	8.7	8.8	8.8	8.6	8.6	8.6	8.2	8.6	8.4	8.8	8.8
50 (F)	7.8	7.2	6.9	7.2	7.2	6.5	6.5	7.2	6.8	7.4	7.4	7.4	7.5	7.4	7.4
76 (F)	8.6	8.2	7.7	7.4	8.1	8.4	8.4	8.2	8.0	7.4	8.2	8.0	8.2	8.2	8.2
MEAN	8.4	8.1	7.6	7.7	8.0	7.9	7.9	8.0	7.8	7.8	7.9	8.0	8.0	8.1	8.1
RDX - 1 mg/kg															
64 (M)	9.2	8.9	8.8	8.9	8.6	8.4	8.4	8.6	8.6	8.4	8.8	7.8	8.3	7.4	7.4
68 (M)	8.2	9.6	9.8	9.9	9.7	9.8	9.8	9.8	9.4	10.2	10.2	10.0	9.9	8.6	8.6
75 (M)	12.2	11.8	11.6	11.9	Dead										
MEAN	9.9	10.1	10.1	10.2	9.2	9.1	9.1	9.2	9.0	9.3	9.5	8.9	9.1	8.0	8.0
40 (F)	9.4	9.3	9.0	9.7	8.8	9.2	9.2	9.0	9.0	9.0	8.8	8.4	8.6	8.6	8.6
41 (F)	9.9	9.5	9.1	9.2	8.4	9.0	9.0	9.0	9.0	8.8	9.0	8.8	8.8	8.8	8.8
54 (F)	7.1	7.0	6.8	7.6	6.6	7.2	7.2	7.4	7.2	7.4	7.2	7.2	7.6	8.2	8.2
MEAN	8.8	8.6	8.3	8.8	7.9	8.5	8.5	8.5	8.4	8.4	8.3	8.1	8.3	8.5	8.5

LITTON BIONETICS, INC.

TABLE 1 (continued)

BODY WEIGHT
(kilograms)

DOG NO. AND SEX	PRE-DRUG	WEEKS OF DRUG ADMINISTRATION 1	2	3	4	5	6	7	8	9	10	11	12	13	TERM-INAL
RDX - 0.1 mg/kg															
59 (M)	9.4	8.7	9.0	9.2	9.2	8.5	8.5	8.6	8.8	8.8	9.2	8.4	8.6	9.3	9.3
61 (M)	9.4	9.4	9.3	9.4	9.0	9.5	9.5	9.4	9.0	9.8	9.4	9.2	9.1	9.0	9.0
67 (M)	7.7	7.9	7.5	7.7	7.0	7.6	7.6	7.6	7.8	7.8	8.0	7.8	7.8	7.6	7.6
MEAN	8.8	8.7	8.6	8.8	8.4	8.5	8.5	8.5	8.5	8.8	8.9	8.5	8.5	8.6	8.6
35 (F)	8.9	8.7	8.4	8.4	7.7	8.4	8.4	8.4	8.0	8.2	8.2	8.2	8.2	8.0	8.0
36 (F)	9.6	9.6	8.9	9.0	8.5	8.8	8.8	8.4	9.0	8.6	9.2	8.6	8.9	9.4	9.4
53 (F)	6.1	6.2	5.9	6.4	5.9	6.4	6.4	6.2	6.2	6.2	6.4	6.0	6.4	6.4	6.4
MEAN	8.2	8.2	7.7	7.9	7.4	7.9	7.9	7.7	7.7	7.7	7.9	7.6	7.8	7.9	7.9

TABLE 1 (continued)

BODY WEIGHT
(kilograms)

DOG NO. AND SEX	PRE-DRUG	WEEKS OF DRUG ADMINISTRATION 1	2	3	4	5	6	7	8	9	10	11	12	13	TERM-INAL
TNT - 1 mg/kg															
69 (M)	9.7	10.0	9.8	9.4	10.4	9.8	9.8	10.4	10.4	10.4	10.4	10.2	10.2	10.2	10.2
70 (M)	10.2	10.3	10.1	10.5	10.3	10.2	10.2	10.2	10.6	10.2	10.6	10.2	10.0	9.8	9.8
71 (M)	11.5	11.5	11.5	11.6	11.4	11.2	11.2	11.6	11.0	11.0	11.0	10.4	11.2	10.8	10.8
MEAN	10.5	10.6	10.5	10.5	10.7	10.4	10.4	10.7	10.7	10.5	10.7	10.3	10.5	10.3	10.3
46 (F)	7.4	7.4	7.2	7.6	7.4	7.2	7.2	8.0	7.6	7.2	7.2	7.2	7.2	7.4	7.4
47 (F)	9.4	9.3	9.1	9.3	9.6	9.0	9.0	9.6	9.8	9.0	8.8	9.0	8.5	8.8	8.8
48 (F)	9.6	9.4	9.2	9.5	9.5	9.5	9.5	10.2	10.0	9.6	9.4	9.6	9.8	9.8	9.8
MEAN	8.8	8.7	8.5	8.8	8.8	8.6	8.6	9.3	9.1	8.6	8.5	8.6	8.5	8.7	8.7
TNT - 0.1 mg/kg															
60 (M)	10.5	10.3	10.4	9.7	10.3	9.2	9.2	10.2	9.0	10.0	10.2	9.8	9.8	10.0	10.0
62 (M)	12.6	12.9	12.6	13.0	12.5	12.4	12.4	12.8	12.6	12.6	12.6	12.2	12.1	12.8	12.8
63 (M)	8.8	9.1	8.9	9.4	8.9	8.4	8.4	9.2	8.8	8.8	8.8	9.0	9.0	9.0	9.0
MEAN	10.6	10.8	10.6	10.7	10.6	10.0	10.0	10.7	10.1	10.5	10.5	10.3	10.3	10.6	10.6
42 (F)	8.0	8.1	8.0	8.5	8.3	8.4	8.4	8.4	8.4	8.2	8.4	7.8	7.9	8.2	8.2
38 (F)	8.0	7.9	7.6	7.8	7.2	7.2	7.2	7.4	7.4	7.4	7.6	7.6	7.2	7.4	7.4
52 (F)	8.7	8.8	8.6	9.1	8.8	8.5	8.6	9.0	9.2	9.0	9.4	9.0	9.2	9.6	9.6
MEAN	8.2	8.3	8.1	8.5	8.1	8.0	8.1	8.3	8.3	8.2	8.5	8.1	8.1	8.4	8.4

LITTON BIONETICS, INC.

TABLE 1 (continued)

BODY WEIGHT
(kilograms)

DOG NO. AND SEX	PRE-DRUG	WEEKS OF DRUG ADMINISTRATION 1	2	3	4	5	6	7	8	9	10	11	12	13	TERM-INAL
TNT - 0.02 mg/kg															
56 (M)	9.8	9.6	9.3	9.6	9.4	9.4	9.4	10.2	8.8	9.8	10.0	9.8	9.8	10.0	10.0
57 (M)	8.4	8.2	7.8	8.6	8.3	8.0	8.0	8.4	8.4	8.2	8.4	8.2	7.9	8.6	8.6
58 (M)	7.7	7.6	7.4	7.5	7.3	7.6	7.6	7.6	7.6	7.6	7.4	7.2	7.2	7.4	7.4
MEAN	8.6	8.5	8.2	8.6	8.3	8.3	8.3	8.7	8.3	8.5	8.6	8.4	8.3	8.7	8.7
39 (F)	7.2	7.8	7.4	7.7	7.5	7.6	7.6	7.4	7.2	7.4	7.2	7.4	7.3	7.0	7.0
44 (F)	8.8	8.6	8.5	8.9	9.1	8.8	8.8	9.2	9.0	9.0	9.4	8.8	9.0	8.7	8.7
51 (F)	7.2	6.9	7.0	7.4	6.9	7.0	7.0	7.2	7.0	7.0	6.8	6.8	6.9	7.0	7.0
MEAN	8.2	7.8	7.6	8.0	7.8	7.8	7.8	7.9	7.7	7.8	7.8	7.7	7.7	7.8	7.6

TABLE 2

HEMATOLOGY - CYTOLOGY

CONTROL

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
3 WEEKS PRE-DRUG														
65 (M)	8.17	1.2	46.0	16.4	10.5	0	0	0	64	29	4	1	0	2
66 (M)	9.86	1.4	56.5	19.7	9.4	0	0	1	59	36	3	1	0	0
72 (M)	8.74	1.0	49.5	17.1	7.4	0	0	0	67	29	2	2	0	0
MEAN	8.92	1.2	50.5	17.7	9.1									
2 WEEKS PRE-DRUG														
65 (M)	7.85	4.2	45.5	16.0	13.0	0	0	0	72	23	3	2	0	0
66 (M)	9.26	3.0	5. 5	19.7	10.7	0	0	0	58	36	4	2	0	0
72 (M)	7.62	1.2	44.0	16.2	9.0	0	0	1	71	27	0	1	0	0
MEAN	8.24	2.8	48.5	17.3	10.9									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

CONTROL

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					4-WEEKS									
65 (M)	8.41	1.4	51.0	17.3	9.7	0	0	0	54	44	2	0	0	0
66 (M)	8.84	2.2	57.0	20.3	10.0	0	0	0	55	43	1	1	0	0
72 (M)	7.76	0.6	47.0	15.6	7.7	0	0	0	74	21	1	4	0	0
MEAN	8.34	1.4	51.5	17.7	9.1									
					8-WEEKS									
65 (M)	7.53	3.4	47.5	15.3	9.9	0	0	0	58	40	2	0	0	0
66 (M)	9.03	1.2	55.5	18.8	8.1	0	0	0	44	52	1	3	0	0
72 (M)	7.97	0.4	47.0	16.6	8.8	0	0	0	70	24	2	4	0	0
MEAN	8.31	1.7	50.0	16.9	8.9									
					13-WEEKS									
65 (M)	7.35	0.6	45.0	15.6	12.2	0	0	0	57	42	1	0	0	0
66 (M)	8.24	0.6	53.0	18.9	9.2	0	0	2	51	45	2	0	0	0
72 (M)	7.75	0.6	45.8	16.1	8.7	0	0	0	61	36	0	3	0	0
MEAN	7.78	0.6	48.0	16.9	10.0									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

CONTROL

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
3 WEEKS PRE-DRUG														
37 (F)	8.79	0.4	52.5	19.2	7.6	0	0	1	71	24	2	2	0	0
43 (F)	7.64	0.6	45.0	16.7	12.2	0	0	0	49	44	5	1	1	0
45 (F)	8.29	0.2	48.5	18.1	14.7	0	0	1	68	22	4	5	0	0
MEAN	8.24	0.4	48.5	18.0	11.5									
2 WEEKS PRE-DRUG														
37 (F)	8.97	1.0	54.0	19.5	7.7	0	0	0	72	25	1	2	0	0
43 (F)	7.23	2.2	45.0	15.8	12.7	0	0	0	67	30	1	2	0	0
45 (F)	8.70	0.6	50.0	17.0	10.7	0	0	0	50	40	3	7	0	0
MEAN	8.30	1.3	49.5	17.4	10.4									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

CONTROL

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					4-WEEKS									
37 (F)	7.88	0.6	51.0	17.2	9.2	0	0	0	46	42	5	7	0	0
43 (F)	7.03	0.4	45.5	15.9	11.6	0	0	0	43	52	4	1	0	0
45 (F)	8.24	1.0	50.5	17.2	10.6	0	0	0	65	30	4	1	0	0
MEAN	7.72	0.7	49.0	16.8	10.5									
					8-WEEKS									
37 (F)	7.77	0.4	48.0	16.3	12.0	0	0	0	61	25	8	5	1	0
43 (F)	6.53	0.8	40.5	14.3	11.0	0	0	1	51	41	5	2	0	0
45 (F)	8.21	0.4	50.0	17.4	8.3	0	0	0	41	50	4	5	0	0
MEAN	7.50	0.5	46.0	16.0	10.4									
					13-WEEKS									
37 (F)	6.83	0.8	45.5	15.8	10.4	0	0	0	58	38	2	2	0	0
43 (F)	6.47	0.4	43.5	15.1	10.8	0	0	0	54	42	1	3	0	0
45 (F)	7.40	0.6	45.5	16.1	9.6	0	0	0	34	66	0	0	0	0
MEAN	6.90	0.6	45.0	15.7	10.3									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

RDX - 10 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					3 WEEKS PRE-DRUG									
55 (M)	9.04	0.8	54.0	19.2	5.8	0	0	0	53	35	7	5	0	0
73 (M)	3.92	0.5	49.0	17.2	6.6	0	0	0	62	34	1	3	0	0
74 (M)	8.21	1.0	49.5	17.5	10.0	0	0	0	73	22	1	4	0	0
MEAN	8.72	0.8	51.0	18.0	7.5									
					2 WEEKS PRE-DRUG									
55 (M)	8.23	1.0	50.5	18.3	7.4	0	0	0	63	34	1	2	0	0
73 (M)	8.07	0.6	47.0	17.0	8.2	0	0	0	75	17	4	4	0	0
74 (M)	7.71	1.4	46.0	16.1	8.4	0	0	0	78	17	1	4	0	0
MEAN	8.00	1.0	48.0	17.1	8.0									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

RDX - 10 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					4-WEEKS									
55 (M)	7.76	0.5	51.0	17.8	7.7	0	0	0	60	28	8	4	0	0
73 (M)	8.08	<0.1	49.5	17.6	8.4	0	0	0	58	32	9	1	0	0
74 (M)	7.11	0.4	47.5	16.8	7.0	0	0	0	59	29	4	8	0	0
MEAN	7.65	<0.3	49.5	17.4	7.7									
					8-WEEKS									
55 (M)	8.41	0.1	53.5	19.0	6.8	0	0	0	77	20	2	1	0	0
73 (M)	8.55	0.1	51.5	17.7	12.9	0	0	0	71	29	0	0	0	0
74 (M)	7.67	1.0	48.5	16.7	12.1	0	0	0	83	15	1	1	0	0
MEAN	8.21	0.4	51.0	17.8	10.6									
					13-WEEKS									
55 (M)	8.36	0.2	51.5	18.3	8.0	0	0	0	70	23	5	2	0	0
73 (M)	7.58	0.2	46.5	16.1	8.3	0	0	0	58	37	5	0	0	0
74 (M)	7.49	0.4	46.0	16.2	7.9	0	0	0	70	26	1	3	0	0
MEAN	7.81	0.3	48.0	16.9	8.1									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

RDX - 10 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
3 WEEKS PRE-DRUG														
49 (F)	7.92	0.6	46.0	16.8	9.5	0	0	2	66	29	2	1	0	0
50 (F)	8.65	0.6	53.5	19.3	10.8	0	0	0	62	32	3	2	0	1
76 (F)	6.81	1.0	42.0	14.7	10.8	0	0	0	43	51	4	2	0	0
MEAN	7.58	0.7	47.0	16.9	10.4									
2 WEEKS PRE-DRUG														
49 (F)	8.11	1.8	47.0	16.5	9.7	0	0	0	55	40	3	2	0	0
50 (F)	7.85	2.6	49.5	17.4	10.2	0	0	0	63	35	0	2	0	0
76 (F)	6.44	3.2	40.5	14.2	10.9	0	0	0	38	57	2	3	0	0
MEAN	7.47	2.5	45.5	16.0	10.3									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

RDX - 10 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					4-WEEKS									
49 (F)	7.79	<0.1	49.0	17.0	9.9	0	0	0	59	38	0	3	0	0
50 (F)	6.52	0.2	44.0	15.6	9.2	0	0	0	63	31	0	6	0	0
76 (F)	7.77	0.8	52.5	18.7	12.1	0	0	0	60	36	3	1	0	0
MEAN	7.36	<0.4	48.5	17.1	10.4									
					8-WEEKS									
49 (F)	7.62	1.4	46.0	16.1	11.2	0	0	0	67	27	5	1	0	0
50 (F)	6.84	1.0	46.0	16.0	10.8	0	0	0	63	27	6	4	0	0
76 (F)	9.32	1.2	57.0	19.4	11.2	0	0	0	49	51	0	0	0	0
MEAN	7.93	1.2	49.5	17.2	10.8									
					13-WEEKS									
49 (F)	7.39	1.0	44.0	15.8	11.2	0	0	0	67	24	4	5	0	0
50 (F)	7.59	0.6	49.5	16.5	11.1	0	0	0	65	31	1	3	0	0
76 (F)	8.15	0.2	52.0	18.8	10.8	0	0	0	61	32	4	3	0	0
MEAN	7.71	0.6	48.5	17.0	11.0									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

RDX - 1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
3 WEEKS PRE-DRUG														
64 (M)	8.48	1.4	51.0	17.8	13.8	0	0	0	52	41	2	5	0	0
68 (M)	9.07	1.4	53.0	18.2	11.1	0	0	0	50	44	4	2	0	0
75 (M)	C L O T T E D					0	0	0	75	22	0	3	0	0
MEAN	8.78	1.4	52.0	18.0	12.5									
2 WEEKS PRE-DRUG														
64 (M)	7.16	1.0	44.0	15.9	9.1	0	0	0	54	40	5	1	0	0
68 (M)	8.44	1.0	50.0	17.7	10.1	0	0	0	52	45	0	3	0	0
75 (M)	8.04	1.4	48.5	17.6	12.4	0	0	0	79	19	1	1	0	0
MEAN	7.88	1.1	47.5	17.1	10.5									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

RDX - 1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					4-WEEKS									
64 (M)	8.16	1.4	51.0	18.3	11.2	0	0	0	57	31	10	2	0	0
68 (M)	8.32	0.6	51.0	16.9	9.8	0	0	0	50	47	2	1	0	0
75 (M)	D E A D													
MEAN	8.24	1.0	51.0	17.6	10.5									
					8-WEEKS									
64 (M)	8.27	0.8	52.0	18.1	8.9	0	0	0	57	42	1	0	0	0
68 (M)	8.16	0.6	52.0	17.7	10.9	0	0	0	57	40	1	2	0	0
75 (M)	D E A D													
MEAN	8.22	0.7	52.0	17.9	9.9									
					13-WEEKS									
64 (M)	7.31	1.0	46.0	16.2	9.7	0	0	0	64	29	5	2	0	0
68 (M)	8.66	0.2	51.5	18.4	10.7	0	0	0	63	32	2	3	0	0
75 (M)	D E A D													
MEAN	7.99	0.6	49.0	17.3	10.2									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

RDX - 1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
3 WEEKS PRE-DRUG														
40 (F)	8.60	0.8	50.0	18.6	14.1	0	0	0	65	32	1	2	0	0
41 (F)	7.03	0.2	40.0	14.5	12.0	0	0	0	51	46	2	1	0	0
54 (F)	9.00	1.0	51.5	18.2	8.4	0	0	1	69	18	7	5	0	0
MEAN	8.21	0.7	47.0	17.1	11.5									
2 WEEKS PRE-DRUG														
40 (F)	8.25	0.8	49.0	17.2	13.7	0	0	0	62	33	2	3	0	0
41 (F)	6.79	0.6	39.5	13.8	11.1	0	0	0	69	28	2	1	0	0
54 (F)	8.45	2.0	48.5	17.5	10.0	0	0	0	65	26	2	7	0	0
MEAN	7.83	1.1	45.5	16.2	11.6									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE . (continued)

HEMATOLOGY - CYTOLOGY

RDX - 1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					4-WEEKS									
40 (F)	7.71	0.4	46.5	16.0	11.0	0	0	0	61	29	1	9	0	0
41 (F)	6.77	0.6	42.0	15.1	11.3	0	0	0	67	28	1	4	0	0
54 (F)	8.00	0.4	49.5	17.4	9.8	0	0	0	58	32	8	2	0	0
MEAN	7.49	0.5	46.0	16.2	10.7									
					8-WEEKS									
40 (F)	7.02	0.8	44.5	14.9	12.0	1	0	0	67	29	2	2	0	0
41 (F)	6.85	0.4	41.0	14.0	11.7	0	0	0	66	33	1	0	0	0
54 (F)	7.71	0.6	49.0	16.9	10.6	0	0	0	55	39	4	2	0	0
MEAN	7.19	0.6	45.0	15.3	11.4									
					13-WEEKS									
40 (F)	7.62	0.2	48.5	17.0	10.9	0	0	0	64	27	3	6	0	0
41 (F)	7.36	0.4	45.0	15.8	18.4	0	0	0	74	22	1	3	0	0
54 (F)	7.20	0.4	43.0	15.2	11.6	0	0	2	62	23	3	10	0	0
MEAN	7.39	0.3	45.5	16.0	13.6									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

RDX - 0.1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
3 WEEKS PRE-DRUG														
59 (M)	8.46	0.4	49.5	17.6	8.3	0	0	1	69	27	2	1	0	0
61 (M)	8.46	0.2	48.5	17.0	8.4	0	0	0	65	28	1	6	0	0
67 (M)	8.05	2.0	48.5	16.5	13.2	0	0	0	54	37	1	8	0	0
MEAN	8.32	0.9	49.0	17.0	10.0									
2 WEEKS PRE-DRUG														
59 (M)	8.05	1.6	47.5	17.3	10.3	0	0	0	72	23	3	2	0	0
61 (M)	8.23	1.6	46.5	16.7	10.5	0	0	0	60	29	2	9	0	0
67 (M)	7.11	2.0	40.0	14.4	13.0	0	0	0	70	28	0	2	0	0
MEAN	7.80	1.7	44.5	16.1	11.3									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

RDX - 0.1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					4-WEEKS									
59 (M)	7.76	0.3	47.5	17.0	10.5	0	0	0	79	13	3	5	0	0
61 (M)	8.92	1.4	55.5	18.3	10.3	0	0	0	56	31	7	6	0	0
67 (M)	7.62	0.6	45.5	15.7	11.0	0	0	0	67	22	0	1	0	0
MEAN	8.10	0.8	49.5	17.0	10.6									
					8-WEEKS									
59 (M)	7.47	1.0	47.5	16.7	7.9	0	0	0	65	27	3	5	0	0
61 (M)	8.67	0.4	49.0	17.4	9.7	0	0	0	61	31	2	6	0	0
67 (M)	7.58	0.6	46.0	15.6	11.8	1	0	2	55	36	2	4	0	0
MEAN	7.91	0.7	47.5	16.6	9.8									
					13-WEEKS									
59 (M)	7.20	0.2	44.5	16.2	9.0	0	0	0	60	38	1	1	0	0
61 (M)	8.07	0.1	49.5	17.0	9.1	0	0	0	56	34	3	7	0	0
67 (M)	7.42	0.2	44.0	15.0	13.4	0	0	0	69	29	0	2	0	0
MEAN	7.56	0.2	46.0	16.1	10.5									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

RDX - 0.1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
3 WEEKS PRE-DRUG														
35 (F)	8.21	0.6	49.0	16.6	9.9	0	0	0	40	55	5	0	0	0
36 (F)	7.16	0.4	43.0	14.7	9.1	0	0	1	50	45	3	0	0	1
53 (F)	9.33	0.3	53.0	19.0	7.9	0	0	1	74	21	1	3	0	0
MEAN	8.23	0.4	48.5	16.8	9.0									
2 WEEKS PRE-DRUG														
35 (F)	7.12	0.6	43.0	15.6	9.6	0	0	0	63	36	1	0	0	0
36 (F)	6.98	1.0	42.0	15.1	12.5	0	0	0	56	42	1	1	0	0
53 (F)	9.12	1.8	52.0	18.7	10.1	0	0	0	65	28	5	2	0	0
MEAN	7.74	1.1	45.5	16.5	10.7									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

RDX - 0.1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					4-WEEKS									
35 (F)	7.80	1.6	53.0	18.3	8.2	0	0	0	55	38	3	4	0	0
36 (F)	7.32	1.8	49.0	16.5	9.3	0	0	0	56	41	2	1	0	0
53 (F)	8.58	0.8	53.5	18.1	9.0	0	0	0	66	28	3	3	0	0
MEAN	7.90	1.4	52.0	17.5	8.8									
					8-WEEKS									
35 (F)	8.85	0.6	54.5	18.9	9.7	0	0	0	55	37	7	1	0	0
36 (F)	8.15	2.0	49.5	17.3	10.3	0	0	0	68	30	2	0	0	0
53 (F)	8.65	2.8	51.0	17.4	11.2	0	0	0	64	23	3	10	0	0
MEAN	8.55	1.8	51.5	17.9	10.4									
					13-WEEKS									
35 (F)	8.42	0.6	52.0	18.6	11.3	0	0	0	53	46	1	0	0	0
36 (F)	7.28	0.6	43.5	15.4	10.8	0	0	0	64	34	1	1	0	0
53 (F)	8.03	0.4	48.5	16.9	9.5	0	0	0	61	30	5	4	0	0
MEAN	7.91	0.5	48.0	17.0	10.5									

*My - Myelocytes, Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

TNT - 1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
3 WEEKS PRE-DRUG														
69 (M)	7.81	2.2	46.5	16.1	10.4	0	0	0	61	36	3	0	0	0
70 (M)	8.77	0.8	54.0	18.5	12.8	0	0	0	55	38	3	4	0	0
71 (M)	8.36	3.4	51.5	18.2	10.8	0	0	0	57	35	2	6	0	0
MEAN	8.31	2.1	50.5	17.6	11.3									
2 WEEKS PRE-DRUG														
69 (M)	7.43	0.6	44.0	16.1	10.9	0	0	0	65	34	0	1	0	0
70 (M)	8.79	1.8	50.5	16.7	11.9	0	0	0	57	42	1	0	0	0
71 (M)	7.83	1.6	48.0	16.2	12.2	0	0	0	58	36	0	6	0	0
MEAN	8.02	1.3	47.5	16.3	11.7									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

TNT - 1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					4-WEEKS									
69 (M)	7.58	0.6	49.5	17.2	10.0	0	0	0	52	41	5	2	0	0
70 (M)	8.71	0.6	55.0	18.8	11.4	0	0	0	53	39	2	6	0	0
71 (M)	7.72	0.8	50.0	17.5	9.8	0	0	0	58	32	3	7	0	0
MEAN	8.00	0.7	51.5	17.8	10.4									
					8-WEEKS									
69 (M)	7.47	0.6	46.5	16.2	13.8	0	0	0	75	24	0	1	0	0
70 (M)	8.48	<0.1	52.5	18.4	12.9	0	0	0	69	29	0	2	0	0
71 (M)	7.28	0.6	48.0	16.7	11.3	0	0	0	48	45	5	2	0	0
MEAN	7.74	<0.4	49.0	17.1	12.7									
					13-WEEKS									
69 (M)	6.99	0.8	45.0	15.3	12.5	0	0	0	80	16	2	2	0	0
70 (M)	7.05	1.0	47.5	16.1	14.9	0	0	0	74	23	2	1	0	0
71 (M)	7.72	2.4	49.0	17.2	10.6	0	0	0	55	36	4	4	0	1
MEAN	7.25	1.4	47.0	16.2	12.7									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

TNT - 1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					3 WEEKS PRE-DRUG									
46 (F)	8.71	0.4	50.5	18.4	8.0	0	0	1	50	44	2	3	0	0
47 (F)	7.31	<0.1	43.5	16.6	8.2	0	0	0	63	31	1	4	0	1
48 (F)	9.18	0.6	54.5	20.3	6.0	0	0	0	68	26	2	4	0	0
MEAN	8.40	<0.4	49.5	18.4	7.4									
					2 WEEKS PRE-DRUG									
46 (F)	8.24	1.6	49.0	16.5	9.7	0	0	0	71	25	0	4	0	0
47 (F)	7.81	1.4	45.0	16.2	9.5	0	0	0	60	39	1	0	0	0
48 (F)	9.00	2.0	56.0	20.4	7.1	0	0	0	54	39	3	4	0	0
MEAN	8.35	1.7	50.0	17.7	8.8									

*My - Myelocytes; Juv - Juveniles Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

TNT - 1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					4-WEEKS									
46 (F)	7.64	0.4	48.0	17.2	9.1	0	0	0	60	31	8	1	0	0
47 (F)	7.15	0.8	46.5	16.2	10.1	0	0	0	67	29	3	1	0	0
48 (F)	8.89	0.2	56.5	20.3	9.8	0	0	1	67	32	0	0	0	0
MEAN	7.87	0.5	50.5	17.9	9.7									
					8-WEEKS									
46 (F)	7.44	1.0	46.0	15.6	8.5	0	0	1	68	28	0	3	0	0
47 (F)	7.07	1.4	44.5	15.7	10.3	0	0	1	69	25	2	3	0	0
48 (F)	8.51	0.4	54.0	19.2	7.5	0	0	0	64	32	0	3	1	0
MEAN	7.67	0.9	48.0	16.8	8.8									
					13-WEEKS									
46 (F)	7.52	0.4	48.0	16.2	9.9	0	0	0	80	17	2	1	0	0
47 (F)	7.35	0.6	47.0	16.3	11.1	0	0	0	77	17	5	1	0	0
48 (F)	6.43	0.8	44.0	15.5	8.1	0	0	0	60	31	6	3	0	0
MEAN	7.10	0.6	46.5	16.0	9.7									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

TNT - 0.1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
3 WEEKS PRE-DRUG														
60 (M)	8.82	1.0	50.5	18.1	7.9	0	0	0	67	32	1	0	0	0
62 (M)	8.11	1.4	48.0	16.0	7.9	0	0	0	46	42	4	8	0	0
63 (M)	8.79	1.0	52.0	18.1	10.0	0	0	0	56	39	1	4	0	0
MEAN	8.57	1.1	50.0	17.4	8.6									
2 WEEKS PRE-DRUG														
60 (M)	8.65	3.4	49.5	17.7	10.6	0	0	0	66	31	1	2	0	0
62 (M)	7.38	0.8	44.0	16.0	8.4	0	0	0	59	35	3	3	0	0
63 (M)	8.17	0.4	48.5	17.0	11.1	0	0	0	64	35	1	0	0	0
MEAN	8.07	1.5	47.5	16.9	10.0									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

TNT - 0.1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					4-WEEKS									
60 (M)	7.49	1.0	47.0	16.5	9.7	0	0	0	64	28	7	1	0	0
62 (M)	7.51	0.2	46.5	16.6	9.1	0	0	0	48	39	6	6	1	0
63 (M)	8.92	<0.1	55.5	19.7	11.0	0	0	0	69	22	7	2	0	0
MEAN	7.97	<0.4	49.5	17.6	9.9									
					8-WEEKS									
60 (M)	7.67	0.6	47.0	16.6	10.6	0	0	0	75	20	4	1	0	0
62 (M)	7.22	0.5	45.0	15.4	10.8	0	0	0	61	25	7	7	0	0
63 (M)	8.53	0.8	52.0	18.3	12.4	0	0	0	73	23	4	0	0	0
MEAN	7.81	0.6	48.0	16.8	11.3									
					13-WEEKS									
60 (M)	7.02	1.8	43.5	15.1	11.9	0	0	3	61	30	3	3	0	0
62 (M)	7.43	0.8	45.0	15.5	9.8	0	0	0	76	16	2	6	0	0
63 (M)	7.92	0.2	50.0	17.4	10.2	0	0	0	65	31	3	1	0	0
MEAN	7.46	0.9	46.0	16.0	10.6									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

TNT - 0.1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
3 WEEKS PRE-DRUG														
42 (F)	8.02	0.4	46.5	17.2	8.8	0	0	0	66	28	2	3	0	1
38 (F)	8.12	1.0	50.0	18.7	10.6	0	0	0	51	40	2	7	0	0
52 (F)	8.65	0.1	52.0	19.0	5.2	0	0	1	45	47	1	5	0	1
MEAN	8.26	0.5	49.5	18.3	8.2									
2 WEEKS PRE-DRUG														
42 (F)	7.60	1.8	45.0	16.2	9.1	0	0	0	71	24	4	1	0	0
38 (F)	7.80	1.0	49.5	17.7	10.0	0	0	0	64	30	2	4	0	0
52 (F)	7.67	0.4	44.0	16.0	7.2	0	0	0	51	39	6	4	0	0
MEAN	7.69	1.1	46.0	16.6	8.8									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

TNT - 0.1 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					4-WEEKS									
42 (F)	7.10	1.0	45.0	15.8	8.9	0	0	0	57	42	0	1	0	0
38 (F)	8.17	0.1	49.5	17.0	9.3	0	0	0	68	22	5	5	0	0
52 (F)	7.60	0.8	51.5	18.2	6.4	0	0	0	57	35	3	5	0	0
MEAN	7.62	0.6	48.5	17.0	8.2									
					8-WEEKS									
42 (F)	6.69	0.6	44.0	15.2	9.2	0	0	0	79	19	2	0	0	0
38 (F)	8.17	0.8	51.5	18.2	8.8	0	0	0	63	35	0	2	0	0
52 (F)	8.17	0.1	51.0	18.1	7.5	0	0	0	55	41	1	3	0	0
MEAN	7.68	0.5	49.0	17.2	8.5									
					13-WEEKS									
42 (F)	6.58	1.0	44.5	15.2	11.1	0	0	2	73	20	1	4	0	0
38 (F)	7.64	0.3	49.0	17.6	7.4	0	0	0	61	32	4	3	0	0
52 (F)	8.58	0.6	53.0	18.8	8.1	0	0	0	53	40	0	7	0	0
MEAN	7.60	0.6	49.0	17.2	8.9									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

TNT - 0.02 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
3 WEEKS PRE-DRUG														
56 (M)	8.24	0.2	47.5	17.0	8.8	0	0	0	64	28	2	6	0	0
57 (M)	8.16	0.6	47.5	16.9	9.7	0	0	0	57	37	1	4	0	1
58 (M)	7.58	0.4	43.5	15.2	9.3	0	0	1	52	36	4	7	0	0
MEAN	7.99	0.4	46.0	16.4	9.3									
2 WEEKS PRE-DRUG														
56 (M)	7.87	2.6	47.5	17.1	8.6	0	0	0	64	35	1	0	0	0
57 (M)	7.43	0.8	42.0	15.6	9.6	0	0	0	70	27	2	1	0	0
58 (M)	7.12	0.8	41.0	14.6	10.0	0	0	0	37	58	0	5	0	0
MEAN	7.47	1.4	43.5	15.8	9.4									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

TNT - 0.02 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					4-WEEKS									
56 (M)	7.55	0.4	49.0	16.8	10.6	0	0	0	69	29	0	2	0	0
57 (M)	7.84	0.4	46.5	16.4	8.8	0	0	0	65	30	1	4	0	0
58 (M)	7.27	0.6	44.0	15.5	10.4	0	0	4	39	47	3	7	0	0
MEAN	7.55	0.5	46.5	16.2	9.9									
					8-WEEKS									
56 (M)	7.68	0.1	47.0	16.3	12.0	0	0	0	59	35	3	3	0	0
57 (M)	7.73	0.2	45.0	15.7	8.3	0	0	0	73	20	5	2	0	0
58 (M)	7.18	0.1	44.5	15.4	12.4	0	0	0	44	51	0	5	0	0
MEAN	7.53	0.1	45.5	15.8	10.9									
					13-WEEKS									
56 (M)	7.33	0.2	45.0	15.9	11.3	0	0	0	76	16	6	2	0	0
57 (M)	7.33	0.2	44.0	15.6	8.3	0	0	0	79	17	2	2	0	0
53 (M)	7.31	0.6	45.0	15.6	9.9	0	0	1	46	47	2	4	0	0
MEAN	7.32	0.3	44.5	15.7	9.8									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

TNT - 0.02 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^3)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
3 WEEKS PRE-DRUG														
39 (F)	8.53	0.8	51.5	18.7	8.7	0	0	0	45	49	2	4	0	0
44 (F)	6.51	0.8	42.0	15.4	9.5	0	0	0	51	46	1	2	0	0
51 (F)	7.42	0.4	46.0	16.9	8.7	0	0	0	38	51	1	10	0	0
MEAN	7.49	0.7	46.5	17.0	9.0									
2 WEEKS PRE-DRUG														
39 (F)	8.32	1.4	48.5	17.3	9.2	0	0	0	64	31	0	5	0	0
44 (F)	6.38	1.6	42.5	14.7	9.6	0	0	0	69	31	0	0	0	0
51 (F)	6.98	2.2	45.0	15.7	9.7	0	0	0	44	46	0	9	1	0
MEAN	7.23	1.7	45.5	15.9	9.5									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

TABLE 2 (continued)

HEMATOLOGY - CYTOLOGY

TNT - 0.02 mg/kg

DOG NO. AND SEX	RBC/mm^3 (x 10^6)	RETIC. %	CELL VOL. %	HEMO-GLOBIN gm %	WBC/mm^3 (x 10^3)	DIFFERENTIAL (%)* My	Juv	Ban	Seg	Ly	Mo	Eo	Bas	UC
					4-WEEKS									
39 (F)	8.55	1.8	52.0	18.5	8.6	0	0	0	65	28	6	1	0	0
44 (F)	7.48	0.6	51.5	17.7	8.3	0	0	0	61	34	4	1	0	0
51 (F)	7.55	0.2	49.0	17.2	12.1	0	0	0	61	31	3	5	0	0
MEAN	7.86	0.9	51.0	17.8	9.7									
					8-WEEKS									
39 (F)	7.68	0.6	48.0	17.2	11.0	0	0	1	51	40	3	5	0	0
44 (F)	7.30	0.4	46.5	16.1	10.8	0	0	0	66	33	1	0	0	0
51 (F)	7.32	0.6	45.0	16.2	10.8	0	0	0	53	45	1	1	0	0
MEAN	7.43	0.5	46.5	16.5	10.9									
					13-WEEKS									
39 (F)	7.43	0.4	47.5	16.8	7.5	0	0	0	63	27	5	5	0	0
44 (F)	7.11	0.6	46.0	16.0	9.9	0	0	0	81	14	5	0	0	0
51 (F)	6.53	0.6	43.0	15.0	9.7	0	0	0	44	55	1	0	0	0
MEAN	7.02	0.5	45.5	15.9	9.0									

*My - Myelocytes; Juv - Juveniles; Ban - Bands; Seg - Segmented Neutrophils; Ly - Lymphocytes; Mo - Monocytes; Eo - Eosinophils; Bas - Basophils; UC - Unclassified.

LITTON BIONETICS, INC.

TABLE 3

HEMATOL^^ - HEINZ BODIES

DOG NO. AND SEX	PRE-DRUG 3 Wks	PRE-DRUG 2 Wks	WEEKS OF DRUG ADMINISTRATION 4	8	13
		CONTROL			
65 (M)	Neg	Neg	Neg	Neg	Neg
66 (M)	Neg	Neg	Neg	Neg	Neg
72 (M)	Neg	Neg	Neg	Neg	Neg
37 (F)	Neg	Neg	Neg	Neg	Pos
43 (F)	Neg	Neg	Neg	Neg	Neg
45 (F)	Neg	Neg	Neg	Neg	Neg

LITTON BIONETICS, INC.

TABLE 3 (continued)

HEMATOLOGY - HEINZ BODIES

DOG NO. AND SEX	PRE-DRUG 3 Wks	PRE-DRUG 2 Wks	WEEKS OF DRUG ADMINISTRATION 4	8	13
RDX - 10 mg/kg					
55 (M)	Neg	Neg	Neg	Neg	Neg
73 (M)	Neg	Neg	Neg	Neg	Neg
74 (M)	Neg	Neg	Neg	Neg	Neg
49 (F)	Neg	Neg	Neg	Neg	Neg
50 (F)	Neg	Neg	Neg	Neg	Neg
76 (F)	Neg	Neg	Neg	Neg	Neg
RDX - 1 mg/kg					
64 (M)	Neg	Neg	Neg	Neg	Pos
68 (M)	Neg	Neg	Neg	Neg	Neg
75 (M)	Dead				
40 (F)	Neg	Neg	Neg	Neg	Neg
41 (F)	Neg	Neg	Neg	Pos	Neg
54 (F)	Neg	Neg	Pos	Neg	Neg
RDX - 0.1 mg/kg					
59 (M)	Neg	Neg	Neg	Neg	Neg
61 (M)	Neg	Neg	Neg	Neg	Neg
67 (M)	Neg	Neg	Neg	Neg	Neg
35 (F)	Neg	Neg	Neg	Neg	Neg
36 (F)	Neg	Neg	Neg	Pos	Neg
53 (F)	Neg	Neg	Neg	Neg	Neg

LITTON BIONETICS, INC.

TABLE 3 (continued)

HEMATOLOGY - HEINZ BODIES

DOG NO. AND SEX	PRE-DRUG		WEEKS OF DRUG ADMINISTRATION		
	3 Wks	2 Wks	4	8	13
TNT - 1 mg/kg					
69 (M)	Neg	Neg	Neg	Neg	Neg
70 (M)	Neg	Neg	Neg	Neg	Neg
71 (M)	Neg	Neg	Pos	Neg	Neg
46 (F)	Neg	Neg	Neg	Neg	Pos
47 (F)	Neg	Neg	Neg	Neg	Neg
48 (F)	Neg	Neg	Pos	Neg	Neg
TNT - 0.1 mg/kg					
60 (M)	Neg	Neg	Neg	Neg	Pos
62 (M)	Neg	Neg	Neg	Neg	Neg
63 (M)	Neg	Neg	Neg	Neg	Neg
42 (F)	Neg	Neg	Neg	Neg	Neg
38 (F)	Neg	Neg	Neg	Neg	Neg
52 (F)	Neg	Neg	Neg	Neg	Neg
TNT - 0.02 mg/kg					
56 (M)	Neg	Neg	Neg	Neg	Neg
57 (M)	Neg	Neg	Neg	Neg	Neg
58 (M)	Neg	Neg	Neg	Neg	Neg
39 (F)	Neg	Neg	Neg	Neg	Neg
44 (F)	Neg	Neg	Neg	Neg	Neg
51 (F)	Neg	Neg	Neg	Neg	Neg

LITTON BIONETICS, INC.

TABLE 4

HEMATOLOGY - RED CELL FRAGILITY

CONTROL

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		3 WEEKS PRE-DRUG	
65 (M)	Max.	.30	100
	Min.	.55	1.0
66 (M)	Max.	.35	100
	Min.	.55	0.8
72 (M)	Max.	.35	100
	Min.	.55	4.4
MEAN	Max.	.33	100
	Min.	.55	2.1
		2 WEEKS PRE-DRUG	
65 (M)	Max.	.30	100
	Min.	.65	1.0
66 (M)	Max.	.40	100
	Min.	.55	5.4
72 (M)	Max.	0.0	100
	Min.	.60	1.0
MEAN	Max.	.23	100
	Min.	.60	2.5

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

CONTROL

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		4-WEEKS	
65 (M)	Max.	.30	100
	Min.	.50	3.7
66 (M)	Max.	0.0	100
	Min.	.50	22.0
72 (M)	Max.	.30	100
	Min.	.55	1.1
MEAN	Max.	.20	100
	Min.	.52	8.9
		8-WEEKS	
65 (M)	Max.	.30	100
	Min.	.50	5.1
66 (M)	Max.	0.0	100
	Min.	.55	1.7
72 (M)	Max.	.35	100
	Min.	.55	2.0
MEAN	Max.	.22	100
	Min.	.53	2.9
		13-WEEKS	
65 (M)	Max.	0.0	100
	Min.	.55	2.1
66 (M)	Max.	.35	100
	Min.	.55	1.8
72 (M)	Max.	.35	100
	Min.	.65	1.0
MEAN	Max.	.23	100
	Min.	.58	1.6

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

CONTROL

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		3 WEEKS PRE-DRUG	
37 (F)	Max.	.35	100
	Min.	.65	1.8
43 (F)	Max.	.30	100
	Min.	.65	2.7
45 (F)	Max.	.35	100
	Min.	.60	1.0
MEAN	Max.	.33	100
	Min.	.63	1.8
		2 WEEKS PRE-DRUG	
37 (F)	Max.	0.0	
	Min.	.55	
43 (F)	Max.	0.0	100
	Min.	.50	2.2
45 (F)	Max.	.30	100
	Min.	.55	0.9
MEAN	Max.	.10	100
	Min.	.53	1.9

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

CONTROL

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		4-WEEKS	
37 (F)	Max.	0.0	100
	Min.	.50	9.6
43 (F)	Max.	.30	100
	Min.	.60	1.7
45 (F)	Max.	.30	100
	Min.	.60	1.0
MEAN	Max.	.20	100
	Min.	.57	4.1
		8-WEEKS	
37 (F)	Max.	.40	100
	Min.	.55	4.0
43 (F)	Max.	.40	100
	Min.	.60	2.4
45 (F)	Max.	.30	100
	Min.	.60	1.0
MEAN	Max.	.37	100
	Min.	.58	2.5
		13-WEEKS	
37 (F)	Max.	.30	100
	Min.	.60	2.1
43 (F)	Max.	.35	100
	Min.	.65	1.1
45 (F)	Max.	.30	100
	Min.	.55	2.1
MEAN	Max.	.32	100
	Min.	.60	1.8

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

RDX - 10 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		3 WEEKS PRE-DRUG	
55 (M)	Max.	.30	100
	Min.	.55	1.8
73 (M)	Max.	.30	100
	Min.	.60	1.0
74 (M)	Max.	.35	100
	Min.	.55	2.0
MEAN	Max.	.32	100
	Min.	.57	1.6
		2 WEEKS PRE-DRUG	
55 (M)	Max.	.35	100
	Min.	.50	8.8
73 (M)	Max.	.30	100
	Min.	.60	0.6
74 (M)	Max.	0.0	100
	Min.	.65	1.0
MEAN	Max.	.22	100
	Min.	.58	3.5

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

RDX - 10 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		4-WEEKS	
55 (M)	Max.	.35	100
	Min.	.50	3.9
73 (M)	Max.	.35	100
	Min.	.65	1.9
74 (M)	Max.	.30	100
	Min.	.60	1.0
MEAN	Max.	.33	100
	Min.	.58	2.3
		8-WEEKS	
55 (M)	Max.	.35	100
	Min.	.65	0.5
73 (M)	Max.	0.0	100
	Min.	.60	0.9
74 (M)	Max.	.35	100
	Min.	.65	2.1
MEAN	Max.	.23	100
	Min.	.63	1.2
		13-WEEKS	
55 (M)	Max.	.30	100
	Min.	.50	1.8
73 (M)	Max.	.48	100
	Min.	.65	1.0
74 (M)	Max.	.35	100
	Min.	.55	1.0
MEAN	Max.	.38	100
	Min.	.57	1.3

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

RDX - 10 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		3 WEEKS PRE-DRUG	
49 (F)	Max.	.35	100
	Min.	.55	1.0
50 (F)	Max.	0.0	100
	Min.	.60	0.9
76 (F)	Max.	.35	100
	Min.	.60	1.1
MEAN	Max.	.23	100
	Min.	.58	1.0
		2 WEEKS PRE-DRUG	
49 (F)	Max.	.35	100
	Min.	.55	1.0
50 (F)	Max.	.35	100
	Min.	.60	1.0
76 (F)	Max.	.30	100
	Min.	.65	1.1
MEAN	Max.	.33	100
	Min.	.60	1.0

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

RDX - 10 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		4-WEEKS	
49 (F)	Max.	.30	100
	Min.	.65	1.0
50 (F)	Max.	.35	100
	Min.	.60	1.1
76 (F)	Max.	.35	100
	Min.	.60	0.9
MEAN	Max.	.33	100
	Min.	.62	1.0
		8-WEEKS	
49 (F)	Max.	.35	100
	Min.	.55	1.0
50 (F)	Max.	0.0	100
	Min.	.65	1.0
76 (F)	Max.	.35	100
	Min.	.65	1.7
MEAN	Max.	.23	100
	Min.	.62	1.2
		13-WEEKS	
49 (F)	Max.	.35	100
	Min.	.55	1.0
50 (F)	Max.	.35	100
	Min.	.55	2.0
76 (F)	Max.	.35	100
	Min.	.50	5.4
MEAN	Max.	.35	100
	Min.	.55	2.8

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

RDX - 1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		3 WEEKS PRE-DRUG	
64 (M)	Max.	.35	100
	Min.	.60	0.9
68 (M)	Max.	0.0	100
	Min.	.55	0.9
75 (M)	Max.	.35	100
	Min.	.60	0.9
MEAN	Max.	.23	100
	Min.	.58	0.9
		2 WEEKS PRE-DRUG	
64 (M)	Max.	0.0	100
	Min.	.55	1.0
68 (M)	Max.	0.0	100
	Min.	.60	1.0
75 (M)	Max.	.35	100
	Min.	.60	1.9
MEAN	Max.	.12	100
	Min.	.58	1.3

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

RDX - 1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		4-WEEKS	
64 (M)	Max.	.30	100
	Min.	.50	1.9
68 (M)	Max.	0.0	100
	Min.	.55	1.0
75 (M)	Max.	-	-
	Min.	-	-
MEAN	Max.	.15	100
	Min.	.53	1.5
		8-WEEKS	
64 (M)	Max.	.30	100
	Min.	.55	0.9
68 (M)	Max.	.30	100
	Min.	.65	0.9
75 (M)	Max.	-	-
	Min.	-	-
MEAN	Max.	.30	100
	Min.	.60	0.9
		13-WEEKS	
64 (M)	Max.	.30	100
	Min.	.50	1.0
68 (M)	Max.	.30	100
	Min.	.60	1.0
75 (M)	Max.	-	-
	Min.	-	-
MEAN	Max.	.30	100
	Min.	.55	1.0

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

RDX - 1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		3 WEEKS PRE-DRUG	
40 (F)	Max.	0.0	100
	Min.	.55	3.4
41 (F)	Max.	.40	100
	Min.	.65	1.2
54 (F)	Max.	.30	100
	Min.	.60	0.9
MEAN	Max.	.23	100
	Min.	.60	1.8
		2 WEEKS PRE-DRUG	
40 (F)	Max.	.35	100
	Min.	.55	2.0
41 (F)	Max.	.35	100
	Min.	.55	5.1
54 (F)	Max.	.35	100
	Min.	.60	1.0
MEAN	Max.	.35	100
	Min.	.57	2.7

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

RDX - 1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		4-WEEKS	
40 (F)	Max.	.35	100
	Min.	.55	3.9
41 (F)	Max.	.35	100
	Min.	.55	1.2
54 (F)	Max.	.40	100
	Min.	.55	3.8
MEAN	Max.	.37	100
	Min.	.55	3.0
		8-WEEKS	
40 (F)	Max.	.35	100
	Min.	.60	2.2
41 (F)	Max.	.35	100
	Min.	.65	1.1
54 (F)	Max.	0.0	100
	Min.	.65	1.0
MEAN	Max.	.23	100
	Min.	.63	1.4
		13-WEEKS	
40 (F)	Max.	0.0	100
	Min.	.60	1.9
41 (F)	Max.	.35	100
	Min.	.50	2.3
54 (F)	Max.	.35	100
	Min.	.50	15.5
MEAN	Max.	.23	100
	Min.	.53	6.6

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

RDX - 0.1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		3 WEEKS PRE-DRUG	
59 (M)	Max.	.35	100
	Min.	.65	0.4
61 (M)	Max.	.35	100
	Min.	.55	3.0
67 (M)	Max.	.35	100
	Min.	.55	1.0
MEAN	Max.	.35	100
	Min.	.58	1.5
		2 WEEKS PRE-DRUG	
59 (M)	Max.	.30	100
	Min.	.60	1.0
61 (M)	Max.	0.0	100
	Min.	.65	1.0
67 (M)	Max.	.30	100
	Min.	.55	1.2
MEAN	Max.	.20	100
	Min.	.60	1.1

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

RDX - 0.1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		4-WEEKS	
59 (M)	Max.	.35	100
	Min.	.55	1.0
61 (M)	Max.	.40	100
	Min.	.60	1.9
67 (M)	Max.	.35	100
	Min.	.55	0.7
MEAN	Max.	.37	100
	Min.	.57	1.2
		8-WEEKS	
59 (M)	Max.	.35	100
	Min.	.60	2.0
61 (M)	Max.	.30	100
	Min.	.55	3.1
67 (M)	Max.	0.0	100
	Min.	.55	2.3
MEAN	Max.	.22	100
	Min.	.57	2.5
		13-WEEKS	
59 (M)	Max.	0.0	100
	Min.	.55	2.0
61 (M)	Max.	.40	100
	Min.	.65	1.0
67 (M)	Max.	.30	100
	Min.	.55	1.1
MEAN	Max.	.23	100
	Min.	.58	1.4

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

RDX - 0.1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		3 WEEKS PRE-DRUG	
35 (F)	Max.	0.0	100
	Min.	.60	1.6
36 (F)	Max.	.30	100
	Min.	.60	0.6
53 (F)	Max.	.35	100
	Min.	.60	0.9
MEAN	Max.	.22	100
	Min.	.60	1.0
		2 WEEKS PRE-DRUG	
35 (F)	Max.	0.0	100
	Min.	.55	6.6
36 (F)	Max.	.35	100
	Min.	.55	2.3
53 (F)	Max.	.35	100
	Min.	.60	0.9
MEAN	Max.	.23	100
	Min.	.57	3.3

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

RDX - 0.1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		4-WEEKS	
35 (F)	Max.	0.0	100
	Min.	.55	1.9
36 (F)	Max.	.35	100
	Min.	.50	16.3
53 (F)	Max.	.30	100
	Min.	.50	7.5
MEAN	Max.	.22	100
	Min.	.52	8.6
		8-WEEKS	
35 (F)	Max.	.35	100
	Min.	.50	12.0
36 (F)	Max.	.30	100
	Min.	.55	1.0
53 (F)	Max.	.35	100
	Min.	.65	1.0
MEAN	Max.	.33	100
	Min.	.57	4.7
		13-WEEKS	
35 (F)	Max.	.30	100
	Min.	.65	0.9
36 (F)	Max.	.30	100
	Min.	.45	17.7
53 (F)	Max.	.35	100
	Min.	.55	2.0
MEAN	Max.	.32	100
	Min.	.55	6.9

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

TNT - 1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		3 WEEKS PRE-DRUG	
69 (M)	Max.	.40	100
	Min.	.60	1.1
70 (M)	Max.	.35	100
	Min.	.60	1.8
71 (M)	Max.	.35	100
	Min.	.60	1.9
MEAN	Max.	.37	100
	Min.	.60	1.6
		2 WEEKS PRE-DRUG	
69 (M)	Max.	0.0	100
	Min.	.65	2.2
70 (M)	Max.	0.0	100
	Min.	.55	8.8
71 (M)	Max.	0.0	100
	Min.	.65	0.6
MEAN	Max.	0.0	100
	Min.	.62	3.9

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

TNT - 1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		4-WEEKS	
69 (M)	Max.	.35	100
	Min.	.65	1.0
70 (M)	Max.	.35	100
	Min.	.60	1.8
71 (M)	Max.	.35	100
	Min.	.55	2.0
MEAN	Max.	.35	100
	Min.	.60	1.6
		8-WEEKS	
69 (M)	Max.	.35	100
	Min.	.55	2.1
70 (M)	Max.	.35	100
	Min.	.55	0.9
71 (M)	Max.	.30	100
	Min.	.50	4.0
MEAN	Max.	.33	100
	Min.	.53	2.3
		13-WEEKS	
69 (M)	Max.	.30	100
	Min.	.55	1.1
70 (M)	Max.	.30	100
	Min.	.50	3.0
71 (M)	Max.	.30	100
	Min.	.55	1.0
MEAN	Max.	.30	100
	Min.	.53	1.7

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

TNT - 1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		3 WEEKS PRE-DRUG	
46 (F)	Max.	.35	100
	Min.	.45	49.0
47 (F)	Max.	.35	100
	Min.	.65	1.0
48 (F)	Max.	0.0	100
	Min.	.55	2.5
MEAN	Max.	.23	100
	Min.	.55	17.5
		2 WEEKS PRE-DRUG	
46 (F)	Max.	0.0	100
	Min.	.60	1.0
47 (F)	Max.	0.0	100
	Min.	.50	6.3
48 (F)	Max.	.30	100
	Min.	.50	5.2
MEAN	Max.	.10	100
	Min.	.53	4.2

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

TNT - 1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		4-WEEKS	
46 (F)	Max.	.35	100
	Min.	.60	2.0
47 (F)	Max.	.30	100
	Min.	.55	2.0
48 (F)	Max.	.35	100
	Min.	.55	0.8
MEAN	Max.	.33	100
	Min.	.57	1.6
		8-WEEKS	
46 (F)	Max.	.35	100
	Min.	.55	4.4
47 (F)	Max.	.35	100
	Min.	.60	1.0
48 (F)	Max.	.35	100
	Min.	.60	0.9
MEAN	Max.	.35	100
	Min.	.58	1.3
		13-WEEKS	
46 (F)	Max.	.35	100
	Min.	.50	2.1
47 (F)	Max.	0.0	100
	Min.	.50	3.5
48 (F)	Max.	.35	100
	Min.	.55	1.7
MEAN	Max.	.23	100
	Min.	.52	2.4

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

TNT - 1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		4-WEEKS	
46 (F)	Max.	.35	100
	Min.	.60	2.0
47 (F)	Max.	.30	100
	Min.	.55	2.0
48 (F)	Max.	.35	100
	Min.	.55	0.8
MEAN	Max.	.33	100
	Min.	.57	1.6
		8-WEEKS	
46 (F)	Max.	.35	100
	Min.	.55	4.4
47 (F)	Max.	.35	100
	Min.	.60	1.0
48 (F)	Max.	.35	100
	Min.	.60	0.9
MEAN	Max.	.35	100
	Min.	.58	1.3
		13-WEEKS	
46 (F)	Max.	.35	100
	Min.	.50	2.1
47 (F)	Max.	0.0	100
	Min.	.50	3.5
48 (F)	Max.	.35	100
	Min.	.55	1.7
MEAN	Max.	.23	100
	Min.	.52	2.4

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

TNT - 0.1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		3 WEEKS PRE-DRUG	
60 (M)	Max.	.30	100
	Min.	.55	0.9
62 (M)	Max.	.35	100
	Min.	.55	2.1
63 (M)	Max.	.30	100
	Min.	.50	3.0
MEAN	Max.	.32	100
	Min.	.53	2.0
		2 WEEKS PRE-DRUG	
60 (M)	Max.	.35	100
	Min.	.60	2.0
62 (M)	Max.	.30	100
	Min.	.55	1.5
63 (M)	Max.	.35	100
	Min.	.65	0.5
MEAN	Max.	.33	100
	Min.	.60	1.3

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

TNT - 0.1 mg/kg

DOG NO. AND SEX		%NaCl	% HEMOLYSIS
		4-WEEKS	
60 (M)	Max.	.35	100
	Min.	.50	6.8
62 (M)	Max.	.30	100
	Min.	.55	1.0
63 (M)	Max.	.35	100
	Min.	.60	0.9
MEAN	Max.	.33	100
	Min.	.55	2.9
		8-WEEKS	
60 (M)	Max.	.35	100
	Min.	.50	3.1
62 (M)	Max.	.30	100
	Min.	.65	1.0
63 (M)	Max.	0.0	100
	Min.	.50	3.9
MEAN	Max.	.22	100
	Min.	.55	2.7
		13-WEEKS	
60 (M)	Max.	.35	100
	Min.	.60	1.1
62 (M)	Max.	0.0	100
	Min.	.50	4.3
63 (M)	Max.	.35	100
	Min.	.65	1.0
MEAN	Max.	.23	100
	Min.	.58	2.1

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

TNT - 0.1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		3 WEEKS PRE-DRUG	
42 (F)	Max.	.30	100
	Min.	.55	1.6
38 (F)	Max.	.35	100
	Min.	.60	2.0
52 (F)	Max.	.30	100
	Min.	.65	0.9
MEAN	Max.	.32	100
	Min.	.60	1.5
		2 WEEKS PRE-DRUG	
42 (F)	Max.	.30	100
	Min.	.55	2.0
38 (F)	Max.	0.0	100
	Min.	.55	1.0
52 (F)	Max.	.35	100
	Min.	.60	2.2
MEAN	Max.	.22	100
	Min.	.57	1.7

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

TNT - 0.1 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		4-WEEKS	
42 (F)	Max.	.35	100
	Min.	.55	1.0
38 (F)	Max.	.40	100
	Min.	.55	4.9
52 (F)	Max.	.35	100
	Min.	.60	0.9
MEAN	Max.	.37	100
	Min.	.57	2.3
		8-WEEKS	
42 (F)	Max.	.35	100
	Min.	.60	1.1
38 (F)	Max.	.35	100
	Min.	.60	1.0
52 (F)	Max.	.35	100
	Min.	.55	0.5
MEAN	Max.	.35	100
	Min.	.58	0.9
		13-WEEKS	
42 (F)	Max.	.35	100
	Min.	.60	1.0
38 (F)	Max.	.35	100
	Min.	.50	4.4
52 (F)	Max.	.35	100
	Min.	.50	7.5
MEAN	Max.	.35	100
	Min.	.53	4.3

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

TNT - 0.02 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		3 WEEKS PRE-DRUG	
56 (M)	Max.	.30	100
	Min.	.55	2.0
57 (M)	Max.	.40	100
	Min.	.55	2.1
58 (M)	Max.	.30	100
	Min.	.50	2.2
MEAN	Max.	.33	100
	Min.	.53	2.1
		2 WEEKS PRE-DRUG	
56 (M)	Max.	.35	100
	Min.	.60	1.0
57 (M)	Max.	0.0	100
	Min.	.60	1.1
58 (M)	Max.	.30	100
	Min.	.50	1.2
MEAN	Max.	.22	100
	Min.	.57	1.1

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

TNT - 0.02 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		4-WEEKS	
56 (M)	Max.	.35	100
	Min.	.65	1.0
57 (M)	Max.	.35	100
	Min.	.55	3.1
58 (M)	Max.	.30	100
	Min.	.55	1.1
MEAN	Max.	.33	100
	Min.	.58	1.7
		8-WEEKS	
56 (M)	Max.	.35	100
	Min.	.60	2.1
57 (M)	Max.	.35	100
	Min.	.55	7.1
58 (M)	Max.	.30	100
	Min.	.55	1.1
MEAN	Max.	.33	100
	Min.	.57	3.4
		13-WEEKS	
56 (M)	Max.	.30	100
	Min.	.50	4.3
57 (M)	Max.	.30	100
	Min.	.65	1.0
58 (M)	Max.	.30	100
	Min.	.55	2.1
MEAN	Max.	.30	100
	Min.	.55	2.5

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

TNT - 0.02 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		3 WEEKS PRE-DRUG	
39 (F)	Max.	.35	100
	Min.	.60	0.9
44 (F)	Max.	.35	100
	min.	.60	1.1
51 (F)	Max.	.35	100
	Min.	.55	1.0
MEAN	Max.	.35	100
	Min.	.58	1.0
		2 WEEKS PRE-DRUG	
39 (F)	Max.	.35	100
	Min.	.55	1.0
44 (F)	Max.	.30	100
	Min.	.55	2.3
51 (F)	Max.	.35	100
	Min.	.55	1.1
MEAN	Max.	.33	100
	Min.	.55	1.5

LITTON BIONETICS, INC.

TABLE 4 (continued)

HEMATOLOGY - RED CELL FRAGILITY

TNT - 0.02 mg/kg

DOG NO. AND SEX		% NaCl	% HEMOLYSIS
		4-WEEKS	
39 (F)	Max.	0.0	100
	Min.	.55	1.0
44 (F)	Max.	0.0	100
	Min.	.60	1.9
51 (F)	Max.	.35	100
	Min.	.55	1.0
MEAN	Max.	.12	100
	Min.	.57	1.3
		8-WEEKS	
39 (F)	Max.	C L O T T E D	
	Min.		
44 (F)	Max.	.30	100
	Min.	.65	2.1
51 (F)	Max.	.30	100
	Min.	.50	3.2
MEAN	Max.	.30	100
	Min.	.58	2.7
		13-WEEKS	
39 (F)	Max.	.35	100
	Min.	.60	2.0
44 (F)	Max.	.35	100
	Min.	.50	19.5
51 (F)	Max.	.30	100
	Min.	.45	9.3
MEAN	Max.	.33	100
	Min.	.52	10.3

TABLE 5

BLOOD BIOCHEMISTRY

CONTROL

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
				3 WEEKS PRE-DRUG						
65 (M)	150	4.5	103	106	13	6.5	0.10	41	27	40
66 (M)	150	5.3	103	104	15	6.3	0.10	48	33	72
72 (M)	153	5.5	106	98	14	6.6	0.15	39	42	40
MEAN	151	5.1	104	103	14	6.5	0.12	43	34	51
				2 WEEKS PRE-DRUG						
65 (M)	148	4.9	100	112	14	6.4	0.30	39	29	51
66 (M)	149	6.4	100	119	14	6.1	0.30	36	42	75
72 (M)	148	5.1	104	98	13	6.3	0.30	22	25	43
MEAN	148	5.5	101	110	14	6.3	0.30	32	32	56

TABLE - (continued)

BLOOD BIOCHEMISTRY

CONTROL

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
					4-WEEKS					
65 (M)	149	4.5	107	101	17	6.3	0.10	54	40	51
66 (M)	149	5.3	106	88	17	6.4	0.35	42	33	57
72 (M)	148	5.2	105	92	15	6.1	0.10	30	22	38
MEAN	149	5.0	106	94	16	6.3	0.18	42	32	49
					8-WEEKS					
65 (M)	149	4.7	107	73	23	6.5	0.10	19	26	70
66 (M)	150	5.0	105	58	21	6.6	0.20	26	35	57
72 (M)	150	5.5	102	80	23	7.1	0.20	26	24	38
MEAN	150	5.1	105	70	22	6.7	0.17	24	28	55
					13-WEEKS					
65 (M)	146	4.5	112	107	26	7.1	0.90	21	43	51
66 (M)	146	4.7	111	100	21	6.4	0.55	37	40	51
72 (M)	147	4.8	113	104	20	6.6	0.35	21	36	33
MEAN	146	4.7	112	104	22	6.7	0.60	26	40	45

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

CONTROL

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLUCOSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILIRUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
				3 WEEKS PRE-DRUG						
37 (F)	148	4.1	102	82	19	6.8	0.15	51	42	66
43 (F)	148	4.6	107	108	22	6.5	0.10	45	42	69
45 (F)	148	4.4	105	92	17	6.1	0.10	39	33	66
MEAN	148	4.4	105	94	19	6.5	0.12	45	39	67
				2 WEEKS PRE-DRUG						
37 (F)	148	4.8	106	82	15	6.9	0.30	30	37	43
43 (F)	147	5.2	109	90	21	6.1	0.15	33	37	57
45 (F)	146	5.3	105	94	15	6.7	0.20	30	29	69
MEAN	147	5.1	107	89	17	6.6	0.22	31	34	56

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

CONTROL

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
					4-WEEKS					
37 (F)	149	5.8	105	88	17	6.8	0.10	42	26	84
43 (F)	147	5.8	105	96	22	6.6	0.10	30	22	75
45 (F)	148	5.0	105	85	15	6.6	0.10	34	22	70
MEAN	148	5.5	105	90	18	6.7	0.10	35	23	76
					8-WEEKS					
37 (F)	150	5.2	109	58	22	6.7	0.30	26	22	99
43 (F)	146	4.7	105	88	33	6.7	0.40	47	31	75
45 (F)	148	4.7	105	62	15	6.8	0.20	17	22	69
MEAN	148	4.9	106	69	23	6.7	0.30	30	25	81
					13-WEEKS					
37 (F)	147	4.7	111	89	16	6.7	0.50	30	33	71
43 (F)	146	4.8	111	90	25	7.4	1.00	30	40	66
45 (F)	146	4.5	107	102	14	6.6	0.35	30	29	70
MEAN	146	4.7	110	94	18	6.9	0.62	30	34	69

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

RDX - 10 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLUCOSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILIRUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
				3 WEEKS PRE-DRUG						
55 (M)	150	5.0	103	102	14	6.8	0.10	36	67	63
73 (M)	151	4.8	106	94	13	6.4	0.20	48	37	66
74 (M)	153	4.9	107	94	17	7.0	0.15	48	37	51
MEAN	151	4.9	105	97	15	6.7	0.15	44	47	60
				2 WEEKS PRE-DRUG						
55 (M)	145	4.5	96	97	12	6.4	0.30	39	46	69
73 (M)	146	4.8	106	98	10	6.4	0.35	21	17	75
74 (M)	146	4.9	104	100	15	6.8	0.30	27	17	60
MEAN	146	4.7	102	98	12	6.5	0.32	29	27	68

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

RDX - 10 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK PHOS. I.U.
					4-WEEKS					
55 (M)	148	4.6	113	94	20	6.3	0.10	26	37	43
73 (M)	144	4.9	105	78	13	6.7	0.50	34	26	51
74 (M)	145	4.8	109	82	18	7.2	0.10	26	56	38
MEAN	146	4.8	109	85	17	6.7	0.23	29	40	44
					8-WEEKS					
55 (M)	155	4.8	105	68	9	7.4	0.40	26	40	46
73 (M)	153	5.1	105	66	14	6.9	0.30	23	37	69
74 (M)	154	4.7	104	64	13	7.4	0.20	62	40	40
MEAN	154	4.9	105	66	12	7.2	0.30	37	39	52
					13-WEEKS					
55 (M)		4.4	112	100	14	7.3	0.40	30	52	57
73 (M)	148	4.5	113	105	11	6.7	0.45	30	33	57
74 (M)	147	4.4	113	106	14	7.1	0.45	44	43	46
MEAN	147	4.4	113	104	13	7.0	0.43	35	43	53

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

RDX - 10 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLUCOSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILIRUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
3 WEEKS PRE-DRUG										
49 (F)	150	5.1	103	110	18	6.2	0.10	36	33	46
50 (F)	150	4.6	100	36	17	6.6	0.15	36	42	63
76 (F)	150	5.2	103	110	20	6.4	0.15	39	33	51
MEAN	150	5.0	102	102	18	6.4	0.13	37	36	53
2 WEEKS PRE-DRUG										
49 (F)	147	5.4	107	103	15	6.3	0.20	30	33	40
50 (F)	147	4.7	98	78	17	6.3	0.30	39	21	63
76 (F)	145	5.0	102	109	16	6.4	0.30	22	13	69
MEAN	146	5.0	102	97	16	6.3	0.27	30	22	57

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

RDX - 10 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLUCOSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILIRUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
					4-WEEKS					
49 (F)	150	4.9	108	82	19	6.2	0.10	34	29	43
50 (F)	147	4.4	117	100	15	6.2	0.10	30	26	51
76 (F)	152	5.9	102	84	16	7.6	0.80	34	29	46
MEAN	150	5.1	109	89	17	6.7	0.33	33	28	47
					8-WEEKS					
49 (F)	155	4.8	105	84	12	6.9	0.20	36	28	40
50 (F)	155	4.4	104	70	15	6.5	0.20	22	26	40
76 (F)	157	5.3	102	76	13	7.5	0.20	38	29	46
MEAN	156	4.8	104	77	13	7.0	0.20	32	28	42
					13-WEEKS					
49 (F)	148	4.3	112	111	15	6.3	0.40	34	36	38
50 (F)	146	4.3	113	101	19	6.7	0.45	37	33	49
76 (F)	148	4.6	112	93	23	7.0	0.50	37	33	57
MEAN	147	4.4	112	102	19	6.7	0.45	36	34	48

LITTON BIONETICS, INC.

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

RDX - 1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLUCOSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILIRUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
				3 WEEKS PRE-DRUG						
64 (M)	152	5.2	103	104	18	6.2	0.20	54	52	78
68 (M)	151	5.0	104	90	17	6.8	0.20	39	52	46
75 (M)	150	5.0	104	108	12	6.4	0.10	39	52	71
MEAN	151	5.1	104	101	16	6.5	0.17	44	52	65
				2 WEEKS PRE-DRUG						
64 (M)	148	4.8	102	95	18	6.0	0.30	27	29	84
68 (M)	147	4.9	107	79	10	6.2	0.30	30	13	49
75 (M)	147	4.9	100	96	13	6.5	0.20	45	42	73
MEAN	147	4.9	103	90	14	6.2	0.27	34	28	69

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

RDX - 1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLUCOSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILIRUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
					4-WEEKS					
64 (M)	148	4.8	108	112	18	5.8	0.10	49	37	71
68 (M)	147	5.2	109	106	16	6.3	0.10	30	26	43
75 (M)	D E A D									
MEAN	148	5.0	109	109	12	6.1	0.10	40	32	57
					8-WEEKS					
64 (M)	149	4.4	106	74	17	6.4	0.20	38	39	63
68 (M)	144	4.5	104	52	17	6.9	0.20	23	29	46
75 (M)	D E A D									
MEAN	147	4.5	105	63	17	6.7	0.20	31	34	55
					13-WEEKS					
64 (M)	147	4.6	112	96	24	6.2	0.60	70	66	82
68 (M)	145	5.0	112	85	19	7.1	0.55	30	36	49
75 (M)	D E A D									
MEAN	146	4.8	112	91	22	6.7	0.58	50	51	66

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

RDX - 1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
				3 WEEKS PRE-DRUG						
40 (F)	150	4.2	108	114	19	6.3	0.10	36	25	84
41 (F)	146	4.6	105	108	22	6.6	0.50	39	42	51
54 (F)	150	4.5	105	98	20	6.9	0.20	48	27	78
MEAN	149	4.4	106	107	20	6.6	0.27	41	31	71
				2 WEEKS PRE-DRUG						
40 (F)	146	4.7	105	78	16	6.6	0.30	30	29	77
41 (F)	144	4.9	105	110	21	6.5	0.25	36	42	49
54 (F)	148	4.8	99	86	19	6.8	0.30	39	17	75
MEAN	146	4.8	103	91	19	6.6	0.28	35	29	67

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

RDX - 1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
					4-WEEKS					
40 (F)	147	4.8	106	86	20	6.3	0.10	26	14	77
41 (F)	146	4.6	107	105	11	6.0	0.10	45	33	40
54 (F)	147	4.6	106	74	18	6.5	0.10	30	18	75
MEAN	147	4.7	106	88	16	6.3	0.10	34	22	64
					8-WEEKS					
40 (F)	150	5.2	104	62	22	6.6	0.20	43	18	97
41 (F)	149	4.7	108	78	20	6.9	0.20	59	33	40
54 (F)	150	4.5	106	54	18	7.1	0.20	43	20	75
MEAN	150	4.8	106	65	20	6.9	0.20	48	24	71
					13-WEEKS					
40 (F)	146	4.8	107	101	21	7.1	0.40	34	29	80
41 (F)	144	4.2	109	118	17	7.3	0.50	40	36	49
54 (F)	144	4.3	107	100	23	6.9	0.40	24	29	94
MEAN	145	4.4	108	106	20	7.1	0.43	33	31	74

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

RDX - 0.1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
				3 WEEKS PRE-DRUG						
59 (M)	150	4.7	106	112	16	6.3	0.15	39	33	70
61 (M)	152	4.4	106	110	16	6.6	0.10	39	21	57
67 (M)	151	4.7	105	96	14	6.4	0.10	51	52	49
MEAN	151	4.6	106	106	15	6.4	0.12	43	35	59
				2 WEEKS PRE-DRUG						
59 (M)	147	5.4	98	97	14	6.4	0.30	42	29	75
61 (M)	147	4.6	99	102	14	6.1	0.30	33	17	66
67 (M)	147	4.5	100	100	12	6.4	0.30	30	25	72
MEAN	147	4.8	99	100	13	6.3	0.30	35	24	71

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

RDX - 0.1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
					4-WEEKS					
59 (M)	150	4.6	112	102	22	6.1	0.10	38	29	75
61 (M)	154	5.1	102	88	20	5.9	0.10	34	14	54
67 (M)	157	5.2	105	103	17	7.0	0.10	38	29	57
MEAN	154	5.0	106	98	20	6.3	0.10	37	24	62
					8-WEEKS					
59 (M)	150	4.5	108	80	15	6.5	0.20	40	26	82
61 (M)	151	4.3	106	60	16	6.7	0.20	36	20	57
67 (M)	150	4.7	106	66	22	7.1	0.20	51	29	43
MEAN	150	4.5	107	69	18	6.8	0.20	42	25	61
					13-WEEKS					
59 (M)	147	4.3	110	106	17	6.3	0.40	34	43	72
61 (M)	147	4.1	112	68	17	6.4	0.35	21	33	51
67 (M)	147	4.5	109	97	14	7.0	0.30	34	43	46
MEAN	147	4.3	110	90	16	6.6	0.35	30	40	56

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

RDX - 0.1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLUCOSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILIRUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
				3 WEEKS PRE-DRUG						
35 (F)	147	4.4	100	98	15	6.7	0.20	39	33	66
36 (F)	145	4.5	106	78	25	6.5	0.30	33	33	46
53 (F)	152	4.8	106	104	20	6.7	0.15	36	27	70
MEAN	148	4.6	104	93	20	6.6	0.22	36	31	61
				2 WEEKS PRE-DRUG						
35 (F)	147	4.7	104	92	15	6.8	0.25	24	29	54
36 (F)	145	5.0	104	96	22	6.8	0.20	39	33	38
53 (F)	149	4.7	100	97	18	6.9	0.30	45	17	70
MEAN	147	4.8	103	95	18	6.8	0.25	36	26	54

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

RDX - 0.1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
					4-WEEKS					
35 (F)	149	4.7	10[illegible]	93	13	6.4	0.10	30	22	46
36 (F)	149	5.2	106	100	15	6.4	0.10	38	26	36
53 (F)	150	5.0	104	94	15	6.8	0.10	38	22	54
MEAN	149	4.9	104	96	14	6.5	0.10	35	23	45
					8-WEEKS					
35 (F)	150	4.5	105	68	13	7.2	0.40	45	33	63
36 (F)	149	4.5	106	82	20	5.4	0.20	47	29	46
53 (F)	149	4.2	108	76	16	6.4	0.20	51	20	38
MEAN	149	4.4	106	75	16	6.3	0.27	48	27	49
					13-WEEKS					
35 (F)	147	4.0	108	83	19	7.3	0.70	34	40	69
36 (F)	144	4.6	108	91	20	7.2	0.35	44	33	51
53 (F)	148	4.1	109	90	20	6.8	0.40	34	33	57
MEAN	146	4.2	108	88	20	7.1	0.48	37	35	59

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

TNT - 1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
				3 WEEKS PRE-DRUG						
69 (M)	151	4.6	106	70	12	6.3	0.15	39	37	36
70 (M)	151	5.2	104	94	11	6.8	0.20	42	52	57
71 (M)	152	4.7	105	98	18	6.7	0.20	54	75	40
MEAN	151	4.8	105	87	14	6.6	0.18	45	55	44
				2 WEEKS PRE-DRUG						
69 (M)	147	4.9	107	79	10	6.2	0.30	30	13	49
70 (M)	146	4.7	100	96	12	6.5	0.30	30	25	70
71 (M)	148	4.9	105	98	14	6.7	0.35	27	33	43
MEAN	147	4.8	104	91	12	6.5	0.32	29	24	54

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

TNT - 1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
					4-WEEKS					
69 (M)	145	4.8	107	86	16	6.9	0.10	26	14	43
70 (M)	146	4.6	108	86	15	6.8	0.15	30	26	51
71 (M)	146	4.8	111	90	17	6.8	0.10	34	60	30
MEAN	146	4.7	109	87	16	6.8	0.12	30	33	41
					8-WEEKS					
69 (M)	155	4.6	108	60	14	7.0	0.30	30	20	33
70 (M)	156	5.0	105	63	14	7.1	0.20	20	26	60
71 (M)	156	4.8	106	68	15	7.2	0.20	26	33	24
MEAN	156	4.8	106	64	14	7.1	0.23	25	26	39
					13-WEEKS					
69 (M)	142	4.2	112	76	13	6.7	0.40	37	25	43
70 (M)	138	4.2	103	56	13	6.6	0.40	37	25	54
71 (M)	146	4.9	113	81	20	7.2	0.40	52	43	38
MEAN	142	4.4	109	71	15	6.8	0.40	42	31	45

LITTON BIONETICS, INC.

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

TNT - 1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLUCOSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILIRUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
3 WEEKS PRE-DRUG										
46 (F)	152	4.8	107	110	17	6.6	0.15	48	42	51
47 (F)	149	4.2	107	104	19	6.1	0.10	42	33	82
48 (F)	150	4.3	104	118	15	6.3	0.20	36	33	63
MEAN	150	4.4	106	111	17	6.3	0.15	42	36	65
2 WEEKS PRE-DRUG										
46 (F)	149	5.9	110	100	13	6.5	0.20	30	37	57
47 (F)	147	4.8	99	100	13	6.3	0.20	27	37	75
48 (F)	148	5.1	109	103	13	6.5	0.20	42	29	51
MEAN	148	5.3	106	101	13	6.4	0.20	33	34	61

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

TNT - 1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
					4-WEEKS					
46 (F)	145	5.0	111	86	25	6.4	0.30	38	26	57
47 (F)	145	4.6	108	82	22	6.1	0.10	26	26	85
48 (F)	150	4.4	111	100	21	6.8	0.20	42	33	57
MEAN	147	4.7	110	89	23	6.4	0.20	35	28	66
					8-WEEKS					
46 (F)	156	4.7	111	78	21	6.9	0.20	38	22	51
47 (F)	156	4.8	112	70	26	6.5	0.20	26	21	94
48 (F)	155	5.2	104	72	19	7.3	0.40	25	26	46
MEAN	156	4.9	109	73	22	6.9	0.27	30	23	64
					13-WEEKS					
46 (F)	146	4.9	113	71	18	6.9	0.40	44	36	49
47 (F)	146	4.5	113	71	18	6.4	0.35	40	36	72
48 (F)	148	4.9	108	82	21	6.5	0.40	40	36	51
MEAN	147	4.7	111	75	19	6.6	0.38	41	36	57

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

TNT - 0.1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLUCOSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILIRUBIN mg %	SGOT I.U.	SGPT Units	ALK. PHOS. I.U.
3 WEEKS PRE-DRUG										
60 (M)	149	5.0	101	110	16	6.7	0.15	42	33	82
62 (M)	151	5.0	106	96	13	6.3	0.10	36	46	57
63 (M)	150	4.8	100	100	11	6.6	0.10	59	29	63
MEAN	150	4.9	102	102	13	6.5	0.12	46	36	67
2 WEEKS PRE-DRUG										
60 (M)	146	4.8	99	108	16	6.7	0.30	42	29	80
62 (M)	146	5.1	102	94	13	6.3	0.25	33	17	70
63 (M)	147	4.8	98	78	13	6.5	0.30	57	25	75
MEAN	146	4.9	100	93	14	6.5	0.28	44	24	75

LITTON BIONETICS, INC.

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

TNT - 0.1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
					4-WEEKS					
60 (M)	149	4.7	108	84	18	6.3	0.10	42	22	66
62 (M)	145	4.6	109	94	14	5.9	0.05	26	22	49
63 (M)	146	4.7	106	84	17	6.5	0.15	34	29	49
MEAN	147	4.7	108	87	16	6.2	0.10	34	24	55
					8-WEEKS					
60 (M)	153	5.0	106	80	18	7.3	0.20	23	24	51
62 (M)	154	4.9	106	70	15	6.8	0.20	23	26	38
63 (M)	156	4.9	105	60	15	6.8	0.30	34	26	43
MEAN	154	4.9	106	70	16	7.0	0.23	27	25	44
					13-WEEKS					
60 (M)	145	4.7	106	68	16	7.1	0.40	44	33	66
62 (M)	138	4.7	109	82	14	6.9	0.50	37	33	49
63 (M)	146	4.7	108	76	17	6.6	0.50	40	36	46
MEAN	143	4.7	108	75	16	6.9	0.47	40	34	54

LITTON BIONETICS, INC.

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

TNT - 0.1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
				3 WEEKS PRE-DRUG						
42 (F)	149	4.4	104	108	18	6.9	0.10	45	33	43
38 (F)	149	4.7	108	86	17	6.5	0.10	33	33	51
52 (F)	150	4.7	104	94	21	6.2	0.15	30	33	33
MEAN	149	4.6	105	96	19	6.5	0.12	36	33	42
				2 WEEKS PRE-DRUG						
42 (F)	148	5.2	103	100	15	6.9	0.20	36	46	46
38 (F)	150	5.4	100	78	13	6.7	0.25	36	37	71
52 (F)	147	4.6	104	103	16	5.8	0.30	27	21	43
MEAN	148	5.1	102	94	15	6.5	0.25	33	35	53

LITTON BIONETICS, INC.

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

TNT - 0.1 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLUCOSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILIRUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
					4-WEEKS					
42 (F)	149	4.4	117	96	23	6.9	0.50	49	40	57
38 (F)	148	4.3	115	102	20	6.6	0.45	38	37	70
52 (F)	147	5.0	109	82	19	5.9	0.10	23	18	33
MEAN	148	4.6	114	93	21	6.5	0.35	37	32	53
					8-WEEKS					
42 (F)	155	5.2	109	60	21	7.4	0.30	25	28	43
38 (F)	155	4.6	103	66	18	6.9	0.50	38	33	49
52 (F)	155	4.8	107	70	17	6.5	0.40	20	24	36
MEAN	155	4.9	106	65	19	6.9	0.40	28	28	43
					13-WEEKS					
42 (F)	146	5.1	109	77	17	7.4	0.45	55	40	57
38 (F)	146	4.0	112	102	20	6.5	0.45	44	43	72
52 (F)	149	4.3	109	70	16	6.5	0.40	34	33	40
MEAN	147	4.5	110	83	18	6.8	0.43	44	39	56

LITTON BIONETICS, INC.

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

TNT - 0.02 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLU-COSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILI-RUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
				3 WEEKS PRE-DRUG						
56 (M)	151	4.6	104	94	14	6.3	0.20	36	27	40
57 (M)	151	4.7	106	94	16	6.5	0.20	42	37	57
58 (M)	150	4.7	106	104	15	5.9	0.10	39	42	43
MEAN	151	4.7	105	97	15	6.2	0.17	39	35	47
				2 WEEKS PRE-DRUG						
56 (M)	148	4.8	100	99	13	6.2	0.25	33	17	46
57 (M)	148	4.9	108	94	15	6.4	0.30	22	21	66
58 (M)	148	5.0	100	83	15	5.8	0.20	36	25	49
MEAN	148	4.9	103	92	14	6.1	0.25	30	21	54

LITTON BIONETICS, INC.

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

TNT - 0.02 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLUCOSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILIRUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
					4-WEEKS					
56 (M)	148	4.9	109	74	17	6.4	0.35	26	22	38
57 (M)	150	4.3	117	90	25	6.1	0.30	34	33	57
58 (M)	150	4.6	111	90	21	5.7	0.15	42	33	43
MEAN	149	4.6	112	85	21	6.1	0.27	34	29	46
					8-WEEKS					
56 (M)	157	4.9	103	62	14	6.8	0.30	20	26	38
57 (M)	156	4.9	108	66	19	6.9	0.30	19	29	49
58 (M)	156	5.1	104	68	21	6.7	0.60	30	33	46
MEAN	156	5.0	105	65	18	6.8	0.40	23	29	44
					13-WEEKS					
56 (M)	148	4.0	114	97	14	6.5	0.30	19	25	46
57 (M)	144	4.0	112	100	14	6.6	0.40	30	36	63
58 (M)	145	4.4	118	114	24	6.4	0.50	34	47	46
MEAN	146	4.1	115	104	17	6.5	0.40	28	36	52

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

TNT - 0.02 mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLUCOSE mg %	BUN mg %	TOTAL PROTEIN gm %	TOTAL BILIRUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
				3 WEEKS PRE-DRUG						
39 (F)	150	4.7	109	100	23	6.7	0.50	36	42	78
44 (F)	149	4.5	100	104	17	6.3	0.15	54	25	71
51 (F)	150	4.9	101	94	15	6.4	0.10	42	37	73
MEAN	150	4.7	103	99	18	6.5	0.25	44	35	74
				2 WEEKS PRE-DRUG						
39 (F)	151	5.4	109	100	14	6.9	0.30	48	42	46
44 (F)	147	5.5	104	102	11	6.3	0.20	27	29	70
51 (F)	147	4.5	99	93	13	6.5	0.25	51	21	77
MEAN	104	5.1	104	98	13	6.6	0.25	42	31	64

LITTON BIONETICS, INC.

TABLE 5 (continued)

BLOOD BIOCHEMISTRY

TNT - 0.0[illegible] mg/kg

DOG NO. AND SEX	Na mEq/L	K mEq/L	Cl mEq/L	GLUCOSE mg %	BUN mg %	TOTAL PROTEIN g.	TOTAL BILIRUBIN mg %	SGOT I.U.	SGPT units	ALK. PHOS. I.U.
					4-WEEKS					
39 (F)	148	4.6	106	90	15	6.2	0.10	42	33	38
44 (F)	148	4.8	103	76	15	7.0	0.50	49	33	63
51 (F)	145	4.6	105	76	18	6.8	0.60	34	76	99
MEAN	147	4.7	105	81	16	6.7	0.40	42	47	67
					8-WEEKS					
39 (F)	156	4.7	108	74	16	6.8	0.30	40	40	33
44 (F)	158	4.6	106	58	19	7.3	0.40	40	20	72
51 (F)	155	5.1	109	64	21	7.2	0.90	25	35	77
MEAN	156	4.8	108	65	19	7.1	0.53	35	32	61
					13-WEEKS					
39 (F)	145	4.4	111	104	21	6.5	0.70	24	47	40
44 (F)	142	4.1	110	110	23	6.6	0.45	27	33	75
51 (F)	145	3.8	113	102	20	6.1	0.50	37	36	73
MEAN	144	4.1	111	105	21	6.4	0.55	29	39	63

TABLE 6

SULFOBROMOPHTHALEIN, U.S.P., DYE CLEARANCE TEST (BSP)
(% Retention at 30 minutes)

DOG NO. AND SEX	PRE-DRUG		WEEKS OF DRUG ADMINISTRATION		
	3 Wks	2 Wks	4	8	13
		CONTROL			
65 (M)	2.0	0.5	2.0	2.5	1.5
66 (M)	4.2	1.0	2.0	5.0	3.5
72 (M)	3.0	2.5	2.5	3.5	4.5
MEAN	3.1	1.3	2.2	3.7	3.2
37 (F)	4.0	5.0	2.0	2.5	4.0
43 (F)	4.0	4.0	3.5	4.0	3.5
45 (F)	2.5	3.5	2.5	4.0	2.5
MEAN	3.5	4.2	2.7	3.5	3.3

TABLE 6 (continued)

SULFOBROMOPHTHALEIN, U.S.P., DYE CLEARANCE TEST (BSP)
(% Retention at 30 minutes)

DOG NO. AND SEX	PRE-DRUG		WEEKS OF DRUG ADMINISTRATION		
	3 Wks	2 Wks	4	8	13
			RDX - 10 mg/kg		
55 (M)	2.5	2.5	2.5	2.3	3.5
73 (M)	5.0	3.0	2.0	2.0	2.0
74 (M)	1.8	0.5	2.5	1.0	2.0
MEAN	3.1	2.0	2.3	1.8	2.5
49 (F)	2.5	3.0	1.5	2.0	4.0
50 (F)	6.0	4.2	4.6	4.0	4.5
76 (F)	3.0	2.5	4.0	2.5	3.5
MEAN	3.8	3.2	3.4	2.8	4.0
			RDX - 1 mg/kg		
64 (M)	2.5	3.0	1.8	4.0	2.5
68 (M)	4.2	1.2	2.0	2.0	2.5
75 (M)	3.0	3.5	DEAD	-	-
MEAN	3.2	2.6	1.9	3.0	2.5
40 (F)	2.5	2.0	1.2	2.5	2.5
41 (F)	4.0	2.5	1.8	1.0	2.0
54 (F)	1.8	1.8	2.0	1.0	4.0
MEAN	2.8	2.1	1.7	1.5	2.8
			RDX - 0.1 mg/kg		
59 (M)	3.5	0.5	1.2	2.5	4.0
61 (M)	4.0	1.2	3.0	3.5	4.0
67 (M)	4.0	0.5	1.2	1.5	2.0
MEAN	3.8	0.7	1.8	2.5	3.3
35 (F)	2.5	2.0	1.8	4.5	4.0
36 (F)	3.0	3.0	2.0	3.5	3.5
53 (F)	2.5	1.8	2.0	2.0	2.5
MEAN	2.7	2.3	1.9	3.3	3.3

TABLE 6 (continued)

SULFOBROMOPHTHALEIN, U.S.P., DYE CLEARANCE TEST (BSP)
(% Retention at 30 minutes)

DOG NO. AND SEX	PRE-DRUG		WEEKS OF DRUG ADMINISTRATION		
	3 Wks	2 Wks	4	8	13
TNT - 1 mg/kg					
69 (M)	3.0	2.0	2.0	3.5	2.0
70 (M)	2.5	3.5	4.2	2.5	2.5
71 (M)	2.5	2.0	1.8	2.5	1.5
MEAN	2.7	2.5	2.7	2.8	2.0
46 (F)	3.0	2.0	3.0	2.5	2.5
47 (F)	2.5	2.5	2.5	1.5	2.0
48 (F)	3.5	3.0	2.5	4.5	6.5*
MEAN	3.0	2.5	2.7	2.8	3.7
TNT - 0.1 mg/kg					
60 (M)	5.0	3.0	2.5	2.5	2.5
62 (M)	4.2	1.0	2.0	3.5	3.5
63 (M)	3.5	1.0	1.0	2.0	2.5
MEAN	4.2	1.7	1.8	2.7	2.8
42 (F)	2.5	3.5	2.0	3.5	2.5
38 (F)	2.0	3.5	3.0	4.0	4.0
52 (F)	2.5	0.5	2.5	2.5	2.5
MEAN	2.3	2.5	2.5	3.3	3.0
TNT - 0.02 mg/kg					
56 (M)	4.2	2.5	3.0	3.5	2.5
57 (M)	3.0	1.0	2.5	2.5	2.5
58 (M)	1.8	1.8	2.0	2.0	3.5
MEAN	3.0	1.8	2.5	2.7	2.8
39 (F)	4.0	3.5	1.2	3.5	2.0
44 (F)	3.0	1.2	1.0	4.0	2.0
51 (M)	1.0	4.2	2.5	1.5	2.5
MEAN	2.7	3.0	1.6	3.0	2.2

*Confirmed by repeat sample.

TABLE 7

METHEMOGLOBIN
(% Saturation)

DOG NO. AND SEX	PRE-DRUG		WEEKS OF DRUG ADMINISTRATION		
	3 Wks	2 Wks	4	8	13
		CONTROL			
65 (M)	0	0	4.0	1.9	0
66 (M)	6.3	9.7	6.4	5.0	0
72 (M)	7.0	0	6.0	6.4	4.7
MEAN	4.4	3.2	5.5	4.4	1.6
37 (F)	0	0	7.4	8.7	8.6
43 (F)	0	0.9	8.0	2.7	0
45 (F)	0	0	5.7	2.1	0
MEAN	0	0.3	7.0	4.5	2.9

LITTON BIONETICS, INC.

TABLE 7 (continued)

METHEMOGLOBIN
(% Saturation)

DOG NO. AND SEX	PRE-DRUG 3 Wks	PRE-DRUG 2 Wks	WEEKS OF DRUG ADMINISTRATION 4	8	13
RDX - 10 mg/kg					
55 (M)	0	0	1.3	0	3.1
73 (M)	0	0	5.3	2.5	0
74 (M)	0	0	7.8	2.4	2.3
MEAN	0	0	4.8	1.6	1.8
49 (F)	0	0	0	0	0
50 (F)	0	0	1.2	0	0
76 (F)	0	0	5.9	0	0
MEAN	0	0	2.4	0	0
RDX - 1 mg/kg					
64 (M)	2.2	0	4.9	1.1	0
68 (M)	0	2.0	3.4	4.8	6.0
75 (M)	0	0.2	DEAD	-	-
MEAN	0.7	0.7	4.2	3.0	3.0
40 (F)	0.8	0	7.8	3.8	3.3
41 (F)	0.7	1.1	4.9	3.7	0
54 (F)	2.0	3.0	6.0	3.2	0
MEAN	1.2	1.4	6.2	3.6	1.1
RDX - 0.1 mg/kg					
59 (M)	0	0	5.2	0	0
61 (M)	0	1.6	6.9	1.2	0
67 (M)	2.6	2.0	9.5	2.0	0
MEAN	0.9	1.2	7.2	1.1	0
35 (F)	0	0	4.1	0	0
36 (F)	1.5	2.3	3.9	0.9	1.3
53 (F)	0	0	2.9	0	0
MEAN	0.5	0.8	3.6	0.3	0.4

LITTON BIONETICS, INC.

TABLE 7 (continued)

METHEMOGLOBIN
(% Saturation)

DOG NO. AND SEX	FRE-DRUG		WEEKS OF DRUG ADMINISTRATION		
	3 Wks	2 Wks	4	8	13
TNT - 1 mg/kg					
69 (M)	1.2	0	8.4	4.3	4.1
70 (M)	0	0	0	2.9	1.8
71 (M)	11.5	0	6.4	18.7	2.0
MEAN	4.3	0	4.9	8.6	2.6
46 (F)	6.4	0	5.2	3.5	2.0
47 (F)	0	1.2	6.4	11.5	0
48 (F)	0	0	0	2.4	0
MEAN	2.1	0.4	3.9	5.8	0.7
TNT - 0.1 mg/kg					
60 (M)	0.8	0	7.2	3.2	1.7
62 (M)	0	0	4.1	2.1	3.1
63 (M)	0	0	3.6	1.7	0
MEAN	0.3	0	5.0	2.3	1.6
42 (F)	1.8	0	0	3.4	1.4
38 (F)	5.1	0	0	2.8	0.8
52 (F)	0	4.5	8.7	12.4	3.0
MEAN	2.3	1.5	2.9	6.2	1.7
TNT - 0.02 mg/kg					
56 (M)	0	0	8.1	4.0	0
57 (M)	5.5	0	0	10.4	0
58 (M)	0	2.9	2.3	7.9	0
MEAN	1.8	1.0	3.5	7.4	0
39 (F)	0	0	-	0	0
44 (F)	1.8	0	8.4	7.6	4.9
51 (F)	3.3	0.3	6.5	5.8	0
MEAN	1.7	0.1	7.5	4.5	1.6

LITTON BIONETICS, INC.

TABLE 8

URINALYSIS

CONTROL 3 WEEKS PRE-DRUG

	DOG NO. & SEX		
	65 (M)	66 (M)	72 (M)
UGOT	59	42	86
Specific Gravity	1.035	1.030	1.059
pH	7.0	6.5	8.0
Protein	30 mg	Trace	50 mg
Sugar	Neg	Neg	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	15-18	Rare	2-3
Red Blood Cells*	-	-	-
Epithelial Cells*	Few	-	-
Ca Oxalate*	Freq	Many	Occ
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	Occ	-	-
Triple Phosphate	Occ	Many	Many
Amorphous	Mod	Mod	Much
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

CONTROL 3 WEEKS PRE-DRUG

	DOG NO. & SEX		
	37 (F)	43 (F)	45 (F)
UGOT	68	68	48
Specific Gravity	1.051	1.059	1.048
pH	6.0	7.0	7.0
Protein	50 mg	50 mg	Neg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	1+	Neg	Neg
White Blood Cells*	5-7	25-30	1-3
Red Blood Cells*	Rare	-	-
Epithelial Cells*	Many	Few	-
Ca Oxalate*	-	-	-
Bacteria*	Small	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	Freq
Triple Phosphate	Freq	Few	Freq
Amorphous	Heavy	Mod	Little
Sulfa	-	-	Occ
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

CONTROL 2 WEEKS PRE-DRUG

	DOG NO. & SEX		
	65 (M)	66 (M)	72 (M)
UGOT	89	80	51
Specific Gravity	1.051	1.042	1.058
pH	8.0	9.0	9.0
Protein	50 mg	50 mg	30 mg
Sugar	Neg**	Neg	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	0-2	2-4	1-3
Red Blood Cells*	-	-	-
Epithelial Cells*	-	-	Occ
Ca Oxalate*	-	Few	-
Bacteria*	Heavy	Heavy	Mod
Casts*	-	-	-
Crystals*:			
Uric Acid	Occ	-	-
Triple Phosphate	Freq	Many	Many
Amorphous	Heavy	Heavy	Heavy
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

CONTROL 2 WEEKS PRE-DRUG

	DOG NO. & SEX		
	37 (F)	43 (F)	45 (F)
UGOT	68	45	57
Specific Gravity	1.056	1.042	1.040
pH	7.0	6.5	8.0
Protein	30 mg	Trace	Trace
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Pos	Neg
White Blood Cells*	15-20	18-22	2-4
Red Blood Cells*	-	TNTC	-
Epithelial Cells*	Freq	Many	-
Ca Oxalate*	Few	-	Occ
Bacteria*	Mod	-	Mod
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	Freq
Triple Phosphate	-	Occ	Freq
Amorphous	-	Mod	Mod
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

CONTROL 4-WEEKS

	DOG NO. & SEX		
	65 (M)	66 (M)	72 (M)
UGOT	54	62	62
Specific Gravity	1.066	1.049	1.061
pH	6.0	7.0	7.0
Protein	30 mg	30 mg	30 mg
Sugar	Neg	Neg	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	5-25+	0-3	-
Red Blood Cells*	0-1	-	-
Epithelial Cells*	Many	-	Few
Ca Oxalate*	Occ	Occ	-
Bacteria*	Occ	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	-
Triple Phosphate	-	Many	Occ
Amorphous	-	-	Little
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

CONTROL 4-WEEKS

	DOG NO. & SEX		
	37 (F)	43 (F)	45 (F)
UGOT	74	62	42
Specific Gravity	1.052	1.053	1.040
pH	7.0	7.0	7.0
Protein	Trace	30 mg	Neg
Sugar	Neg	Neg	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	8-10	3-5	Rare
Red Blood Cells*	-	-	-
Epithelial Cells*	Freq	Freq	Occ
Ca Oxalate*	-	-	-
Bacteria*	-	Occ	Mod
Casts*	-	-	-
Crystals*:			
Uric Acid	Freq	Occ	Freq
Triple Phosphate	Occ	Freq	Occ
Amorphous	Mod	Heavy	Little
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

CONTROL 8-WEEKS

	DOG NO. & SEX		
	65 (M)	66 (M)	72 (M)
UGOT	66	62	59
Specific Gravity	1.058	1.048	1.054
pH	7.0	8.0	7.5
Protein	Trace	50 mg	50 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	2-4	Rare	5-6
Red Blood Cells*	-	-	-
Epithelial Cells*	Freq	Occ	Rare
Ca Oxalate*	-	-	-
Bacteria*	-	Mod	Little
Casts*	-	Rare Hyaline	-
Crystals*:			
Uric Acid	Freq	-	-
Triple Phosphate	Occ	Mod	Mod
Amorphous	Little	-	-
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

CONTROL 8-WEEKS

	DOG NO. & SEX		
	37 (F)	43 (F)	45 (F)
UGOT	70	25	49
Specific Gravity	1.047	1.026	1.048
pH	8.0	6.0	7.5
Protein	Trace	Neg	Trace
Sugar	Neg**	Neg	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	0-3	-	-
Red Blood Cells*	-	-	-
Epithelial Cells*	-	Rare	Rare
Ca Oxalate*	-	-	-
Bacteria*	Mod	Heavy	Mod
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	-
Triple Phosphate	Mod	Rare	Few
Amorphous	-	-	-
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

CONTROL 13-WEEKS

	DOG NO. & SEX		
	65 (M)	66 (M)	72 (M)
UGOT	48	48	37
Specific Gravity	1.088	1.051	1.064
pH	7.5	7.5	8.0
Protein	100 mg	100 mg	100 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	-	-	-
Red Blood Cells*	-	-	-
Epithelial Cells*	0-2	-	0.1
Ca Oxalate*	Many	Many	Few
Bacteria*	-	Slight	-
Casts*	0-1	-	0-2
Crystals*:			
Uric Acid	-	-	-
Triple Phosphate	Many	Many	Many
Amorphous	Mod	-	Mod
Sulfa	-	-	-
Remarks	Waxy casts	-	Waxy casts

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

CONTROL 13-WEEKS

	DOG NO. & SEX		
	37 (F)	43 (F)	45 (F)
UGOT	55	48	34
Specific Gravity	1.058	1.063	1.055
pH	9.0	6.5	8.0
Protein	100 mg	Trace	30 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	-	-	0-2
Red Blood Cells*	-	-	0-2
Epithelial Cells*	0-2	0-1	-
Ca Oxalate*	Few	-	Many
Bacteria*	-	-	-
Casts*	-	0-1	0-1
Crystals*:			
Uric Acid	-	Many	-
Triple Phosphate	Many	-	Many
Amorphcus	Mod	-	Mod
Sulfa	-	-	-
Remarks	-	Waxy casts	Waxy casts

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 10 mg/kg 3 WEEKS PRE-DRUG

	DOG NO. & SEX		
	55 (M)	73 (M)	74 (M)
UGOT	65	59	54
Specific Gravity	1.067	1.032	1.048
pH	6.0	7.0	8.0
Protein	30 mg	Neg	Trace
Sugar	Neg**	Neg**	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	3-5	4-5	0-2
Red Blood Cells*	-	-	-
Epithelial Cells*	-	-	-
Ca Oxalate*	-	Occ	Occ
Bacteria*	-	Small	-
Casts*	-	-	-
Crystals*:			
Uric Acid	Many	-	-
Triple Phosphate	Many	Few	Many
Amorphous	Much	-	Mod
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 10 mg/kg 3 WEEKS PRE-DRUG

	DOG NO. & SEX		
	49 (F)	50 (F)	76 (F)
UGOT	36	48	36
Specific Gravity	1.024	1.031	1.056
pH	7.0	6.1	6.0
Protein	Neg	Neg	Trace
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	1+	Neg
White Blood Cells*	8-10	25-30	3-4
Red Blood Cells*	-	2-3	-
Epithelial Cells*	Rare	Freq	Occ
Ca Oxalate*	Occ	-	-
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	Occ	-	Freq
Triple Phosphate	-	-	-
Amorphous	Heavy	Much	Little
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 10 mg/kg 2 WEEKS PRE-DRUG

	DOG NO. & SEX		
	55 (M)	73 (M)	74 (M)
UGOT	22	89	51
Specific Gravity	1.016	1.032	1.049
pH	7.0	8.0	7.5
Protein	Neg	30 mg	30 mg
Sugar	Neg	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	1-3	3-4	1-2
Red Blood Cells*	-	-	-
Epithelial Cells*	-	Few	-
Ca Oxalate*	-	Freq	Freq
Bacteria*	Much	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	Occ
Triple Phosphate	Freq	Freq	Occ
Amorphous	Much	-	Mod
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 10 mg/kg 2 WEEKS PRE-DRUG

	DOG NO. & SEX		
	49 (F)	50 (F)	76 (F)
UGOT	54	36	45
Specific Gravity	1.033	1.034	1.048
pH	6.5	7.0	6.0
Protein	Neg	Trace	Trace
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	12-15	14-16	4-8
Red Blood Cell *	-	-	-
Epithelial Cells*	-	Many	-
Ca Oxalate*	-	-	-
Bacteria*	Mod	Mod	-
Casts*	-	-	Occ. Waxy
Crystals*:			
Uric Acid	Freq	-	Many
Triple Phosphate	Occ	Occ	Occ
Amorphous	Heavy	Mod	-
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 10 mg/kg 4-WEEKS

	DOG NO. & SEX		
	55 (M)	73 (M)	74 (M)
UGOT	45	88	190
Specific Gravity	1.035	1.034	1.039
pH	7.0	9.0	9.0
Protein	Trace	30 mg	300 mg
Sugar	Neg	Neg	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	1+
White Blood Cells*	3-6	Rare	2-5
Red Blood Cells*	-	-	6-7
Epithelial Cells*	Rare	-	-
Ca Oxalate*	-	-	-
Bacteria*	Mod	Occ	Heavy
Casts*	-	-	-
Crystals*:			
Uric Acid	Many	-	-
Triple Phosphate	Occ	-	-
Amorphous	Mod	Little	Heavy
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 10 mg/kg 4-WEEKS

	DOG NO. & SEX		
	49 (F)	50 (F)	76 (F)
UGOT	45	26	112
Specific Gravity	1.042	1.020	1.033
pH	6.0	5.0	9.0
Protein	Neg	Neg	100 mg
Sugar	Neg	Neg	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	Rare	Rare	9-11
Red Blood Cells*	-	-	-
Epithelial Cells*	Occ	Rare	-
Ca Oxalate*	-	-	-
Bacteria*	Mod	Heavy	Heavy
Casts*	-	-	-
Crystals*:			
Uric Acid	Freq	-	-
Triple Phosphate	Occ	-	-
Amorphous	Little	Mod	Heavy
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 10 mg/kg 8-WEEKS

	DOG NO. & SEX		
	55 (M)	73 (M)	74 (M)
UGOT	18	34	59
Specific Gravity	1.016	1.023	1.042
pH	6.0	6.5	6.5
Protein	30 mg	Trace	30 mg
Sugar	Neg**	Neg	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	Rare	0-2	5-7
Red Blood Cells*	-	-	-
Epithelial Cells*	Occ	-	Occ
Ca Oxalate*	-	-	-
Bacteria*	Heavy	Heavy	Mod
Casts*	-	-	-
Crystals*:			
Uric Acid	-	Occ	Occ
Triple Phosphate	-	-	Occ
Amorphous	Mod	Mod	Mod
Sulfa	-	-	-
Remarks	-	-	Occ Mucous Threads

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 10 mg/kg 8-WEEKS

	DOG NO. & SEX		
	49 (F)	50 (F)	76 (F)
UGOT	32	38	43
Specific Gravity	1.033	1.027	1.048
pH	7.0	6.0	7.0
Protein	30 mg	Trace	Trace
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Trace	Trace	Neg
White Blood Cells*	6-8	10-12	10-12
Red Blood Cells*	Rare	Rare	-
Epithelial Cells*	Occ	Rare	Occ
Ca Oxalate*	-	-	-
Bacteria*	Occ	Heavy	Occ
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	Occ
Triple Phosphate	Occ	-	-
Amorphous	Little	-	Heavy
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 10 mg/kg 13-WEEKS

	DOG NO. & SEX		
	55 (M)	73 (M)	74 (M)
UGOT	40	37	52
Specific Gravity	1.034	1.038	1.034
pH	8.0	6.0	6.0
Protein	30 mg	30 mg	30 mg
Sugar	Neg**	Neg**	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	1-3	1-2	4-8
Red Blood Cells*	-	-	-
Epithelial Cells*	Occ	-	Freq
Ca Oxalate*	-	-	-
Bacteria*	-	-	-
Casts*	-	0-1	-
Crystals*:			
Uric Acid	-	Freq	Freq
Triple Phosphate	Occ	-	-
Amorphous	Mod	Mod	Heavy
Sulfa	-	-	-
Remarks	-	Coarsely gran. casts	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 10 mg/kg 13-WEEKS

	DOG NO. & SEX		
	49 (F)	50 (F)	76 (F)
UGOT	48	21	44
Specific Gravity	1.041	1.018	1.063
pH	7.5	7.0	6.0
Protein	30 mg	Trace	Trace
Sugar	Neg**	Neg**	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Pos	Neg	Neg
White Blood Cells*	2-5	2-3	Rare
Red Blood Cells*	6-8	-	-
Epithelial Cells*	Freq	-	-
Ca Oxalate*	Occ	-	-
Bacteria*	-	Heavy	-
Casts*	-	2-3	-
Crystals*:			
Uric Acid	-	Occ	Freq
Triple Phosphate	Occ	-	-
Amorphous	Heavy	-	Little
Sulfa	-	-	-
Remarks	-	Finely gran. casts	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 1 mg/kg 3 WEEKS PRE-DRUG

	DOG NO. & SEX		
	64 (M)	68 (M)	75 (M)
UGOT	51	62	68
Specific Gravity	1.030	1.048	1.052
pH	7.0	8.0	8.0
Protein	Trace	50 mg	100 mg
Sugar	Neg	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	6-8	2-4	5-7
Red Blood Cells*	-	-	-
Epithelial Cells*	-	-	Few
Ca Oxalate*	Occ	Many	Occ
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	Many	-	Occ
Triple Phosphate	-	Few	Few
Amorphous	Heavy	Heavy	-
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 1 mg/kg 3 WEEKS PRE-DRUG

	DOG NO. & SEX		
	40 (F)	41 (F)	54 (F)
UGOT	36	71	59
Specific Gravity	1.024	1.046	1.061
pH	6.0	7.0	6.0
Protein	Neg	Trace	Trace
Sugar	Neg**	Neg**	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	3-5	1-3	10-20
Red Blood Cells*	-	-	-
Epithelial Cells*	Freq	Freq	-
Ca Oxalate*	-	-	Few
Bacteria*	Mod	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	Freq	-
Triple Phosphate	Freq	Many	Many
Amorphous	-	-	-
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

PDX - 1 mg/kg 2 WEEKS PRE-DRUG

	DOG NO. & SEX		
	64 (M)	68 (M)	75 (M)
UGOT	86	51	68
Specific Gravity	1.042	1.045	1.040
pH	8.5	7.0	8.5
Protein	30 mg	30 mg	50 mg
Sugar	Neg**	Neg	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	8-10	1-2	2-4
Red Blood Cells*	-	-	-
Epithelial Cells*	-	-	-
Ca Oxalate*	-	-	-
Bacteria*	Mod	Occ	Heavy
Casts*	-	-	-
Crystals*:			
Uric Acid	Many	Many	-
Triple Phosphate	-	Occ	Many
Amorphous	Much	Mod	Heavy
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 1 mg/kg 2 WEEKS PRE-DRUG

	DOG NO. & SEX		
	40 (F)	41 (F)	54 (F)
UGOT	36	59	59
Specific Gravity	1.031	1.041	1.060
pH	6.0	6.5	7.0
Protein	Trace	Trace	30 mg
Sugar	Neg**	Neg**	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	4-6	7-10	12-15
Red Blood Cells*	-	-	-
Epithelial Cells*	-	Freq	-
Ca Oxalate*	-	-	-
Bacteria*	Mod	-	Little
Casts*	-	-	-
Crystals*:			
Uric Acid	-	Freq	Occ
Triple Phosphate	Freq	Freq	Freq
Amorphous	Mod	-	Little
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 1 mg/kg 4-WEEKS

	DOG NO. & SEX		
	64 (M)	68 (M)	75 (M)
UGOT	88	74	D E A D
Specific Gravity	1.064	1.049	
pH	9.0	9.0	
Protein	50 mg	50 mg	
Sugar	Neg	Neg	
Ketones	Neg	Neg	
Bilirubin	Neg	Neg	
Occult Blood	Neg	Neg	
White Blood Cells*	1-2	2-3	
Red Blood Cells*	-	-	
Epithelial Cells*	Rare	-	
Ca Oxalate*	-	-	
Bacteria*	-	-	
Casts*	-	-	
Crystals*:			
Uric Acid	Freq	Freq	
Triple Phosphate	Freq	Freq	
Amorphous	Heavy	Heavy	
Sulfa	-	-	
Remarks	-	-	

*Microscopic (per high power field)

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 1 mg/kg 4-WEEKS

	DOG NO. & SEX		
	40 (F)	41 (F)	54 (F)
UGOT	160	62	-
Specific Gravity	1.030	1.033	-
pH	9.0	6.5	-
Protein	500 mg	Neg	-
Sugar	Neg	Neg	-
Ketones	Neg	Neg	-
Bilirubin	Neg	Neg	-
Occult Blood	Neg	Neg	-
White Blood Cells*	Rare	1-2	-
Red Blood Cells*	-	-	-
Epithelial Cells*	Rare	Occ	-
Ca Oxalate*	-	-	-
Bacteria*	Mod	Occ	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	-
Triple Phosphate	-	-	-
Amorphous	Mod	Little	-
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 1 mg/kg 8-WEEKS

	DOG NO. & SEX		
	64 (M)	68 (M)	75 (M)
UGOT	78	30	D E A D
Specific Gravity	1.058	1.014	
pH	9.0	8.0	
Protein	1000 mg	Trace	
Sugar	Neg	Neg**	
Ketones	Neg	Neg	
Bilirubin	Neg	Neg	
Occult Blood	Neg	Neg	
White Blood Cells*	2-5	1-2	
Red Blood Cells*	-	-	
Epithelial Cells*	Rare	Rare	
Ca Oxalate*	-	-	
Bacteria*	Heavy	Mod	
Casts*	-	-	
Crystals*:			
Uric Acid	Occ	Freq	
Triple Phosphate	Many	-	
Amorphous	Mod	Little	
Sulfa	-	-	
Remarks	-	-	

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 1 mg/kg 8-WEEKS

	DOG NO. & SEX		
	40 (F)	41 (F)	54 (F)
UGOT	22	70	47
Specific Gravity	1.019	1.050	1.063
pH	6.0	6.0	7.0
Protein	Trace	Trace	30 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	3-4	Rare	15-20
Red Blood Cells*	-	-	-
Epithelial Cells*	Occ	Occ	Occ
Ca Oxalate*	-	-	-
Bacteria*	Mod	-	-
Casts*	0-1	-	-
Crystals*:			
Uric Acid	-	Occ	-
Triple Phosphate	-	Occ	Occ
Amorphous	Little	Little	Little
Sulfa	-	-	-
Remarks	Finely gran. casts	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 1 mg/kg 13-WEEKS

	DOG NO. & SEX		
	64 (M)	68 (M)	75 (M)
UGOT	66	21	DEAD
Specific Gravity	1.063	1.020	
pH	9.0	7.0	
Protein	30 mg	Trace	
Sugar	Neg**	Neg	
Ketones	Neg	Neg	
Bilirubin	Neg	Neg	
Occult Blood	Neg	Neg	
White Blood Cells*	2-3	0-1	
Red Blood Cells*	-	-	
Epithelial Cells*	-	-	
Ca Oxalate*	-	-	
Bacteria*	-	Heavy	
Casts*	-	Occ	
Crystals*:			
Uric Acid	-	Freq	
Triple Phosphate	Freq	-	
Amorphous	Mod	-	
Sulfa	-	-	
Remarks	-	Waxy casts	

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 1 mg/kg 13-WEEKS

	DOG NO. & SEX		
	40 (F)	41 (F)	54 (F)
UGOT	30	62	37
Specific Gravity	1.027	1.038	1.049
pH	6.0	7.0	6.5
Protein	Neg	Trace	30 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	2-4	Occ	Rare
Red Blood Cells*	-	-	-
Epithelial Cells*	Occ	Occ	Freq
Ca Oxalate*	-	Occ	-
Bacteria*	Little	-	-
Casts*	0-1	Occ	-
Crystals*:			
Uric Acid	-	Occ	Freq
Triple Phosphate	-	Occ	-
Amorphous	Little	-	Heavy
Sulfa	-	-	-
Remarks	Coarsely gran. casts	Waxy casts	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 0.1 mg/kg 3 WKS PRE-DRUG

	DOG NO. & SEX		
	59 (M)	61 (M)	67 (M)
UGOT	54	45	51
Specific Gravity	1.046	1.029	1.027
pH	8.0	8.0	7.0
Protein	100 mg	Trace	Trace
Sugar	Neg	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	0-2	0-3	Rare
Red Blood Cells*	-	-	-
Epithelial Cells*	-	-	-
Ca Oxalate*	-	Few	-
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	Few
Triple Phosphate	Many	Many	-
Amorphous	-	-	Mod
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 0.1 mg/kg 3 WEEKS PRE-DRUG

	DOG NO. & SEX		
	35 (F)	36 (F)	53 (F)
UGOT	39	59	62
Specific Gravity	1.024	1.031	1.051
pH	5.5	6.5	7.0
Protein	Trace	Trace	Trace
Sugar	Neg**	Neg**	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	1-3	3-5	8-10
Red Blood Cells*	-	-	-
Epithelial Cells*	Occ	Occ	-
Ca Oxalate*	-	-	-
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	Few	-
Triple Phosphate	Occ	Few	Many
Amorphous	Mod	-	-
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 0.1 mg/kg 2 WEEKS PRE-DRUG

	DOG NO. & SEX		
	59 (M)	61 (M)	67 (M)
UGOT	59	65	74
Specific Gravity	1.046	1.042	1.029
pH	6.5	7.0	9.0
Protein	30 mg	Trace	Trace
Sugar	Neg	Neg**	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	7-10	2-4	4-5
Red Blood Cells*	-	-	-
Epithelial Cells*	Few	-	-
Ca Oxalate*	-	-	-
Bacteria*	-	-	Heavy
Casts*	-	-	-
Crystals*:			
Uric Acid	Freq	Freq	Freq
Triple Phosphate	Occ	-	Many
Amorphous	Little	Mod	Heavy
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 0.1 mg/kg 2 WEEKS PRE-DRUG

	DOG NO. & SEX		
	35 (F)	36 (F)	53 (F)
UGOT	45	77	62
Specific Gravity	1.027	1.049	1.056
pH	7.0	7.0	7.0
Protein	Trace	Trace	30 mg
Sugar	Neg	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	2-4	8-10	TNTC
Red Blood Cells*	-	-	-
Epithelial Cells*	-	Few	Occ
Ca Oxalate*	-	-	-
Bacteria*	-	-	-
Casts*	-	-	0-1
Crystals*:			
Uric Acid	Occ	-	-
Triple Phosphate	Occ	Freq	Many
Amorphous	Mod	Mod	Little
Sulfa	-	-	-
Remarks	-	-	Coarsely gran. casts

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 0.1 mg/kg 4-WEEKS

	DOG NO. & SEX		
	59 (M)	61 (M)	67 (M)
UGOT	70	78	82
Specific Gravity	1.054	1.064	1.062
pH	6.0	6.0	7.5
Protein	Trace	30 mg	30 mg
Sugar	Neg**	Neg	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	2-5	1-3	10-12
Red Blood Cells*	-	-	-
Epithelial Cells*	Occ	Occ	Occ
Ca Oxalate*	-	Occ	-
Bacteria*	-	-	Occ
Casts*	-	-	-
Crystals*:			
Uric Acid	Few	Occ	-
Triple Phosphate	Few	Freq	Many
Amorphous	Heavy	Mod	Heavy
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 0.1 mg/kg 4-WEEKS

	DOG NO. & SEX		
	35 (F)	36 (F)	53 (F)
UGOT	62	78	66
Specific Gravity	1.034	1.049	1.049
pH	7.0	6.5	7.0
Protein	Neg	Trace	30 mg
Sugar	Neg	Neg	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	
Occult Blood	Neg	Neg	
White Blood Cells*	5-10	15-20	
Red Blood Cells*	-	-	-
Epithelial Cells*	Many	Occ	Occ
Ca Oxalate*	-	-	-
Bacteria*	-	-	Occ
Casts*	-	-	0-1
Crystals*:			
Uric Acid	Freq	Occ	Occ
Triple Phosphate	Freq	Many	-
Amorphous	Heavy	Mod	-
Sulfa	-	-	-
Remarks	-	-	Finely gran. casts

*Microscopic (per high power field)

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 0.1 mg/kg 8-WEEKS

	DOG NO. & SEX		
	59 (M)	61 (M)	67 (M)
UGOT	52	62	57
Specific Gravity	1.044	1.054	1.039
pH	7.0	7.0	7.0
Protein	30 mg	30 mg	30 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	[illegible]
White Blood Cells*	3-5	1-3	[illegible]
Red Blood Cells*	-	-	-
Epithelial Cells*	Few	Rare	-
Ca Oxalate*	Occ	-	-
Bacteria*	Occ	Little	Occ
Casts*	-	Occ	-
Crystals*:			
Uric Acid	Occ	Freq	-
Triple Phosphate	Freq	Occ	Occ
Amorphous	Mod	Mod	Little
Sulfa	-	-	-
Remarks	-	Hyaline casts	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 0.1 mg/kg 8-WEEKS

	DOG NO. & SEX		
	35 (F)	36 (F)	53 (F)
UGOT	36	62	45
Specific Gravity	1.026	1.039	1.044
pH	7.0	7.0	7.0
Protein	Trace	30 mg	30 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	6-8	7-10	1-3
Red Blood Cells*	-	-	-
Epithelial Cells*	Occ	Occ	Rare
Ca Oxalate*	-	-	-
Bacteria*	Occ	Occ	Occ
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	-
Triple Phosphate	Freq	Freq	-
Amorphous	Heavy	Mod	Little
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 0.1 mg/kg 13-WEEKS

	DOG NO. & SEX		
	59 (M)	61 (M)	67 (M)
UGOT	48	78	70
Specific Gravity	1.048	1.066	1.066
pH	7.0	7.0	8.0
Protein	30 mg	100 mg	50 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	2-5	8-10	5-8
Red Blood Cells*	-	-	-
Epithelial Cells*	-	-	-
Ca Oxalate*	Occ	-	Occ
Bacteria*	-	-	-
Casts*	-	0-1[1] Rare[2] 1-2[3]	-
Crystals*:			
Uric Acid	Freq	Freq	-
Triple Phosphate	Occ	-	Freq
Amorphous	Heavy	Heavy	Mod
Sulfa	-	-	-
Remarks	Occ leucine spheres	[1]Coarsely gran. casts [2]Waxy casts [3]Finely gran. casts	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

RDX - 0.1 mg/kg 13-WEEKS

	DOG NO. & SEX		
	35 (F)	36 (F)	53 (F)
UGOT	27	70	40
Specific Gravity	1.048	1.049	1.062
pH	7.0	6.5	7.0
Protein	30 mg	30 mg	30 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Pos	Neg
White Blood Cells*	0-3	2-4	6-8
Red Blood Cells*	-	Rare	-
Epithelial Cells*	Occ	Few	-
Ca Oxalate*	Mod	-	Occ
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	Freq	Many
Triple Phosphate	Mod	-	-
Amorphous	Slight	Little	Little
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 1 mg/kg 3 WEEKS PRE-DRUG

	DOG NO. & SEX		
	69 (M)	70 (M)	71 (M)
UGOT	4	48	48
Specific Gravity	1.058	1.031	1.026
pH	7.0	7.0	7.5
Protein	50 mg	Trace	Trace
Sugar	Neg**	Neg	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	3-5	8-10	18-20
Red Blood Cells*	-	-	-
Epithelial Cells*	-	-	Rare
Ca Oxalate*	-	Occ	Rare
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	Occ	-
Triple Phosphate	Few	Occ	Many
Amorphous	Much	Mod	-
Sulfa	Freq	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 1 mg/kg 3 WEEKS PRE-DRUG

	DOG NO. & SEX		
	46 (F)	47 (F)	48 (F)
UGOT	68	71	54
Specific Gravity	1.048	1.054	1.039
pH	7.5	7.5	6.0
Protein	30 mg	30 mg	Trace
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	15-18	12-15	6-7
Red Blood Cells*	-	-	-
Epithelial Cells*	Freq	Occ	Occ
Ca Oxalate*	-	-	-
Bacteria*	-	-	Mod
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	-
Triple Phosphate	Many	Many	-
Amorphous	Heavy	-	Little
Sulfa	Occ	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 1 mg/kg 2 WEEKS PRE-DRUG

	DOG NO. & SEX		
	69 (M)	70 (M)	71 (M)
UGOT	71	65	71
Specific Gravity	1.040	1.035	1.028
pH	7.0	6.5	7.0
Protein	30 mg	Trace	Trace
Sugar	Neg	Neg	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Trace	Neg
White Blood Cells*	8-10	0-10	12-15
Red Blood Cells*	-	-	-
Epithelial Cells*	-	1-2	-
Ca Oxalate*	-	-	-
Bacteria*	Mod	-	Mod
Casts*	-	-	0-1
Crystals*:			
Uric Acid	Many	-	Freq
Triple Phosphate	-	-	Occ
Amorphous	Mod	Heavy	Little
Sulfa	-	-	-
Remarks	-	-	Coarsely gran. casts

*Microscopic (per high power field)

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 1 mg/kg 2 WEEKS PRE-DRUG

	DOG NO. & SEX		
	46 (F)	47 (F)	48 (F)
UGOT	68	54	57
Specific Gravity	-	1.050	1.048
pH	8.0	7.0	6.5
Protein	30 mg	Trace	Trace
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Pos	Neg	Neg
White Blood Cells*	9-12	7-10	4-8
Red Blood Cells*	8-10	-	-
Epithelial Cells*	-	Occ	-
Ca Oxalate*	-	-	-
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	Many	Many
Triple Phosphate	Freq	Few	Occ
Amorphous	Little	Mod	Mod
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 1 mg/kg 4-WEEKS

	DOG NO. & SEX		
	69 (M)	70 (M)	71 (M)
UGOT	132	202	190
Specific Gravity	1.030	1.025	1.029
pH	9.0	9.0	9.0
Protein	300 mg	600 mg	500 mg
Sugar	Neg	Neg	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	6-8	5-8	2-5
Red Blood Cells*	-	-	-
Epithelial Cells*	-	-	Occ
Ca Oxalate*	-	-	-
Bacteria*	Mod	Mod	Heavy
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	-
Triple Phosphate	Occ	-	Freq
Amorphous	Heavy	Mod	Heavy
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 1 mg/kg 4-WEEKS

	DOG NO. & SEX		
	46 (F)	47 (F)	48 (F)
UGOT	222	222	62
Specific Gravity	1.026	1.048	1.074
pH	9.0	9.0	6.0
Protein	300 mg	300 mg	30 mg
Sugar	Neg	Neg	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	2-5	Rare	-
Red Blood Cells*	-	-	-
Epithelial Cells*	-	Rare	-
Ca Oxalate*	-	-	-
Bacteria*	Mod	Mod	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	-
Triple Phosphate	Rare	-	-
Amorphous	Heavy	Little	-
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 1 mg/kg 8-WEEKS

	DOG NO. & SEX		
	69 (M)	70 (M)	71 (M)
UGOT	59	54	54
Specific Gravity	1.048	1.035	1.035
pH	6.5	7.0	7.0
Protein	30 mg	Trace	Trace
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	Rare	2-4	1-3
Red Blood Cells*	-	-	-
Epithelial Cells*	-	Occ	Occ
Ca Oxalate*	Occ	-	-
Bacteria*	-	Occ	-
Casts*	-	-	-
Crystals*:			
Uric Acid	Occ	Occ	Occ
Triple Phosphate	Occ	Occ	Occ
Amorphous	Little	-	Mod
Sulfa	-	-	-
Remarks	-	Many mucous threads	Many mucous threads

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 1 mg/kg 8-WEEKS

	DOG NO. & SEX		
	46 (F)	47 (F)	48 (F)
UGOT	40	49	32
Specific Gravity	1.034	1.049	1.048
pH	7.0	7.0	6.5
Protein	Trace	Neg	Neg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	2-4	Rare	Rare
Red Blood Cells*	-	-	-
Epithelial Cells*	Occ	-	Occ
Ca Oxalate*	-	-	-
Bacteria*	Mod	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	Occ	Occ	-
Triple Phosphate	Occ	Occ	-
Amorphous	Little	Little	Little
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 1 mg/kg 13-WEEKS

	DOG NO. & SEX		
	69 (M)	70 (M)	71 (M)
UGOT	48	37	118
Specific Gravity	1.039	1.018	1.039
pH	6.5	7.0	8.0
Protein	Trace	Neg	30 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	1-2	1-2	10-12
Red Blood Cells*	-	-	-
Epithelial Cells*	-	-	-
Ca Oxalate*	-	-	-
Bacteria*	Mod	Mod	Mod
Casts*	-	-	-
Crystals*:			
Uric Acid	Occ	Freq	-
Triple Phosphate	-	-	Freq
Amorphous	Mod	Little	Mod
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 1 mg/kg 13-WEEKS

	DOG NO. & SEX		
	46 (F)	47 (F)	48 (F)
UGOT	55	62	55
Specific Gravity	1.035	1.049	1.051
pH	8.0	8.0	7.0
Protein	Trace	Trace	Trace
Sugar	Neg	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	2-4	Occ	1-2
Red Blood Cells*	-	-	-
Epithelial Cells*	-	Occ	-
Ca Oxalate*	-	-	Occ
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	Occ
Triple Phosphate	Occ	Occ	Occ
Amorphous	Mod	Little	Little
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.1 mg/kg 3 WEEKS PRE-DRUG

	DOG NO. & SEX		
	60 (M)	62 (M)	63 (M)
UGOT	74	62	48
Specific Gravity	1.058	1.033	1.035
pH	7.0	8.0	7.0
Protein	50 mg	30 mg	Trace
Sugar	Neg	Neg**	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	-	-	5-8
Red Blood Cells*	-	-	-
Epithelial Cells*	-	-	Occ
Ca Oxalate*	Many	Few	-
Bacteria*	-	-	Mod
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	-
Triple Phosphate	Many	Many	Mod
Amorphous	-	Some	Mod
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.1 mg/kg 3 WEEKS PRE-DRUG

	DOG NO. & SEX		
	42 (F)	38 (F)	52 (F)
UGOT	62	54	83
Specific Gravity	1.049	1.040	1.058
pH	6.0	7.0	7.0
Protein	30 mg	Trace	30 mg
Sugar	Neg**	Neg**	Trace
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	30-35	10-12	-
Red Blood Cells*	-	-	-
Epithelial Cells*	Freq	Few	-
Ca Oxalate*	Occ	Occ	Few
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	-
Triple Phosphate	Occ	Many	Many
Amorphous	-	Heavy	-
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.1 mg/kg 2 WEEKS PRE-DRUG

	DOG NO. & SEX		
	60 (M)	62 (M)	63 (M)
UGOT	95	51	[illegible]
Specific Gravity	1.060	1.027	1.033
pH	7.0	7.0	7.5
Protein	50 mg	Neg	Trace
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	2-4	6-8	-
Red Blood Cells*	-	-	-
Epithelial Cells*	-	-	Freq
Ca Oxalate*	-	-	Occ
Bacteria*	-	-	-
Casts*	-	-	0-2
Crystals*:			
Uric Acid	Many	Occ	-
Triple Phosphate	Many	Occ	Many
Amorphous	Mod	Mod	Mod
Sulfa	-	-	-
Remarks	-	-	Finely gran. casts

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.1 mg/kg 2 WEEKS PRE-DRUG

	DOG NO. & SEX		
	42 (F)	38 (F)	52 (F)
UGOT	51	65	92
Specific Gravity	1.040	1.048	1.049
pH	6.5	8.0	7.0
Protein	Trace	Trace	30 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	25-35	8-10	0-1
Red Blood Cells*	-	-	-
Epithelial Cells*	Few	Freq	-
Ca Oxalate*	-	-	-
Bacteria*	-	-	Small
Casts*	-	-	-
Crystals*:			
Uric Acid	Freq	-	Many
Triple Phosphate	Few	Freq	-
Amorphous	Little	Mod	Many
Sulfa	-	-	Some
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.1 mg/kg 4-WEEKS

	DOG NO. & SEX		
	60 (M)	62 (M)	63 (M)
UGOT	150	102	78
Specific Gravity	1.056	1.048	1.049
pH	9.0	9.0	9.0
Protein	300 mg	30 mg	30 mg
Sugar	Neg	Neg	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	4-6	5-7	8-10
Red Blood Cells*	-	-	-
Epithelial Cells*	-	-	-
Ca Oxalate*	Freq	-	-
Bacteria*	Heavy	Heavy	Little
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	-
Triple Phosphate	Occ	-	Occ
Amorphous	Heavy	Heavy	Little
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.1 mg/kg 4-WEEKS

	DOG NO. & SEX		
	42 (F)	38 (F)	52 (F)
UGOT	74	8	78
Specific Gravity	1.028	1.006	1.034
pH	9.0	6.0	9.0
Protein	30 mg	Neg	30 mg
Sugar	Neg	Neg	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	1+	-	-
White Blood Cells*	0-2	0-2	2-4
Red Blood Cells*	Rare	-	-
Epithelial Cells*	-	Rare	-
Ca Oxalate*	-	-	-
Bacteria*	Occ	Heavy	Occ
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	-
Triple Phosphate	-	Occ	Few
Amorphous	Heavy	Mod	Heavy
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.1 mg/kg 8-WEEKS

	DOG NO. & SEX		
	60 (M)	62 (M)	63 (M)
UGOT	62	59	78
Specific Gravity	1.066	1.048	1.048
pH	9.0	7.0	9.0
Protein	300 mg	30 mg	1000 mg
Sugar	Neg	Neg**	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	2-4	3-5	-
Red Blood Cells*	-	-	-
Epithelial Cells*	Occ	Occ	-
Ca Oxalate*	-	Mod	-
Bacteria*	Mod	-	Many
Casts*	0-2	-	-
Crystals*:			
Uric Acid	-	Occ	Occ
Triple Phosphate	Freq	Occ	Occ
Amorphous	Mod	-	-
Sulfa	-	-	-
Remarks	Hyaline casts	-	Motile bact.

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.1 mg/kg 8-WEEKS

	DOG NO. & SEX		
	42 (F)	38 (F)	52 (F)
UGOT	62	59	38
Specific Gravity	1.059	1.025	1.032
pH	6.0	7.0	7.0
Protein	Trace	Neg	Trace
Sugar	Neg**	Neg	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	3-6	2-3	1-2
Red Blood Cells*	-	-	-
Epithelial Cells*	Rare	Rare	Rare
Ca Oxalate*	-	-	-
Bacteria*	Occ	Heavy	Occ
Casts*	-	-	-
Crystals*:			
Uric Acid	-	Occ	Occ
Triple Phosphate	Occ	-	-
Amorphous	Little	Little	Little
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.1 mg/kg 13-WEEKS

	DOG NO. & SEX		
	60 (M)	62 (M)	63 (M)
UGOT	66	66	37
Specific Gravity	1.084	1.048	1.032
pH	6.5	7.0	6.5
Protein	100 mg	Trace	Trace
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	0-2	2-3	-
Red Blood Cells*	-	-	-
Epithelial Cells*	-	-	-
Ca Oxalate*	Occ	Freq	-
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	Freq	Freq	Few
Triple Phosphate	-	-	-
Amorphous	Mod	Little	Mod
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.1 mg/kg 13-WEEKS

	DOG NO. & SEX		
	22 (F)	38 (F)	52 (F)
UGOT	37	66	52
Specific Gravity	1.048	1.049	1.044
pH	8.0	6.5	7.0
Protein	30 mg	Trace	30 mg
Sugar	1+**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	2-4	1-2	Rare
Red Blood Cells*	-	-	-
Epithelial Cells*	-	Few	Occ
Ca Oxalate*	-	-	-
Bacteria*	Occ	-	-
Casts*	0-2	-	-
Crystals*:			
Uric Acid	-	Few	-
Triple Phosphate	Freq	-	Occ
Amorphous	Mod	Mod	Mod
Sulfa	-	-	-
Remarks	Coarsely gran. casts	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.02 mg/kg 3 WEEKS PRE-DRUG

	DOG NO. & SEX		
	56 (M)	57 (M)	58 (M)
UGOT	62	80	68
Specific Gravity	1.067	1.054	1.047
pH	6.0	7.0	7.0
Protein	30 mg	30 mg	30 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	15-20	-	5-8
Red Blood Cells*	-	-	-
Epithelial Cells*	Freq	-	-
Ca Oxalate*	-	Many	Many
Bacteria*	-	Some	-
Casts*	-	-	-
Crystals*:			
Uric Acid	Occ	-	-
Triple Phosphate	-	Many	Many
Amorphous	Heavy	-	-
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.02 mg/kg 3 WEEKS PRE-DRUG

	DOG NO. & SEX		
	39 (F)	44 (F)	51 (F)
UGOT	86	68	86
Specific Gravity	1.049	1.058	1.058
pH	7.0	6.0	7.5
Protein	Trace	30 mg	30 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	25-30	10-12	1-3
Red Blood Cells*	-	-	-
Epithelial Cells*	Occ	Freq	Occ
Ca Oxalate*	-	-	-
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	Occ	-
Triple Phosphate	Few	-	Many
Amorphous	Heavy	Mod	Little
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.02 mg/kg 2 WEEKS PRE-DRUG

	DOG NO. & SEX		
	56 (M)	57 (M)	58 (M)
UGOT	51	62	71
Specific Gravity	1.008	1.047	1.048
pH	7.0	7.0	9.0
Protein	Neg	30 mg	100 mg
Sugar	Neg	Neg	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	2-5	6-8	2-5
Red Blood Cells*	-	-	-
Epithelial Cells*	Occ	-	-
Ca Oxalate*	-	Occ	-
Bacteria*	Mod	-	Mod
Casts*	-	-	-
Crystals*:			
Uric Acid	-	Occ	Few
Triple Phosphate	-	Freq	Many
Amorphous	Mod	Mod	Heavy
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.02 mg/kg 2 WEEKS PRE-DRUG

	DOG NO. & SEX		
	39 (F)	44 (F)	51 (F)
UGOT	68	105	71
Specific Gravity	1.055	1.067	1.062
pH	7.0	6.0	8.0
Protein	30 mg	30 mg	Trace
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	10-15	10-12	2-3
Red Blood Cells*	-	-	-
Epithelial Cells*	Few	Few	Few
Ca Oxalate*	-	Occ	-
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	Freq
Triple Phosphate	Many	-	Freq
Amorphous	Mod	Much	-
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.02 mg/kg 4-WEEKS

	DOG NO. & SEX		
	56 (M)	57 (M)	58 (M)
UGOT	102	82	142
Specific Gravity	1.065	1.035	1.058
pH	8.0	9.0	9.0
Protein	100 mg	30 mg	300 mg
Sugar	Neg**	Neg	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	8-10	12-15	1-3
Red blood Cells*	-	-	-
Epithelial Cells*	Rare	-	Rare
Ca Oxalate*	-	-	-
Bacteria*	-	Mod	Mod
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	-
Triple Phosphate	-	-	-
Amorphous	Little	Heavy	Little
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.02 mg/kg 4-WEEKS

	DOG NO. & SEX		
	39 (F)	44 (F)	51 (F)
UGOT	126	82	138
Specific Gravity	1.051	1.031	1.043
pH	9.0	9.0	9.0
Protein	300 mg	30 mg	Trace
Sugar	Neg**	Neg	Neg
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	3-6	18-20	1-3
Red Blood Cells*	-	-	-
Epithelial Cells*	Rare	Rare	Rare
Ca Oxalate*	-	-	-
Bacteria*	Mod	Mod	Mod
Casts*	-	-	-
Crystals*:			
Uric Acid	-	-	-
Triple Phosphate	-	-	Occ
Amorphous	Mod	Mod	Heavy
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.02 mg/kg 8-WEEKS

	DOG NO. & SEX		
	56 (M)	57 (M)	58 (M)
UGOT	70	47	66
Specific Gravity	1.060	1.049	1.058
pH	7.0	7.0	8.0
Protein	100 mg	30 mg	50 mg
Sugar	Neg	Neg	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	3-5	1-3	0-2
Red Blood Cells*	-	-	-
Epithelial Cells*	Freq	-	Occ
Ca Oxalate*	Occ	-	-
Bacteria*	Mod	-	Occ
Casts*	-	-	-
Crystals*:			
Uric Acid	Occ	Occ	Occ
Triple Phosphate	Occ	Occ	Occ
Amorphous	Mod	Little	Mod
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.02 mg/kg 8-WEEKS

	DOG NO. & SEX		
	39 (F)	44 (F)	51 (F)
UGOT	8	66	70
Specific Gravity	1.055	1.054	1.055
pH	9.0	7.0	7.0
Protein	100 mg	50 mg	Trace
Sugar	Neg**	Neg	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	14-16	8-12	1-2
Red Blood Cells*	-	-	-
Epithelial Cells*	Freq	Occ	-
Ca Oxalate*	-	-	-
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	Occ	Occ
Triple Phosphate	Occ	Occ	Rare
Amorphous	Mod	Little	Little
Sulfa	-	-	-
Remarks	-	-	Occ leucene spheres

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.02 mg/kg 13-WEEKS

	DOG NO. & SEX		
	56 (M)	57 (M)	58 (M)
UGOT	66	62	40
Specific Gravity	1.061	1.052	1.031
pH	8.0	6.5	7.0
Protein	50 mg	30 mg	30 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occult Blood	Neg	Neg	Neg
White Blood Cells*	2-4	Rare	2-4
Red Blood Cells*	-	-	-
Epithelial Cells*	-	-	-
Ca Oxalate*	-	-	-
Bacteria*	-	-	Mod
Casts*	-	-	-
Crystals*:			
Uric Acid	-	Many	Occ
Triple Phosphate	Freq	-	Occ
Amorphous	[illegible]	Mod	Mod
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

LITTON BIONETICS, INC.

TABLE 8 (continued)

URINALYSIS

TNT - 0.02 mg/kg 13-WEEKS

	DOG NO. & SEX		
	39 (F)	44 (F)	51 (F)
UGOT	58	66	90
Specific Gravity	1.055	1.059	1.062
pH	8.0	6.0	6.0
Protein	30 mg	30 mg	30 mg
Sugar	Neg**	Neg**	Neg**
Ketones	Neg	Neg	Neg
Bilirubin	Neg	Neg	Neg
Occ. Blood	Neg	Neg	Neg
White Blood Cells*	-	1-3	1-2
Red Blood Cells*	-	-	-
Epithelial Cells*	Freq	-	-
Ca Oxalate*	Occ	-	-
Bacteria*	-	-	-
Casts*	-	-	-
Crystals*:			
Uric Acid	-	Freq	Occ
Triple Phosphate	-	-	-
Amorphous	Mod-Heavy	Mod	Little
Sulfa	-	-	-
Remarks	-	-	-

*Microscopic (per high power field)
**Positive for non-glucose reducing substances.

PATHOLOGY SUMMARY

No major significant microscopic lesions were observed in either the high dosage RDX or the high dosage TNT groups which were not observed in controls. The incidence of microcalculi in the renal pelvis was higher in the test animals, in particular, those treated with RDX. The incidence of hemosiderosis of the bone marrow was higher in the animals treated with TNT. The small sizes of the groups used in this study make interpretation of the increases in incidences of renal microcalculi and of bone marrow hemosiderosis highly precarious.

10 June 1974

WALTER F. LOEB, V.M.D., Ph.D.

LITTON BIONETICS, INC.

SUMMARY OF MICROSCOPIC LESIONS

	CONTROL	RDX 10 mg/kg	TNT 1 mg/kg
Heart			
No visible lesions (NVL)	5	5	6
Medial thickening of muscular arteries	1		
Focal hyalinization		1	
Lung			
NVL	3	2	3*
Congestion	3	3	
Edema	2	2	
Mineralization	1		
Lymphoid nodules	1		
Alveolar thickening			1
Anthracosis		1	
Granulomas (minute)	1		1
Liver			
NVL	3	4	6
Extramedullary hematopoiesis	2	1	
Dilitation and thickening of portal and central veins	1		
Multifocal lymphoreticular infiltrate		1	
Spleen			
NVL	2	3	2
Congestion	4	3	4
Lymphoid hypoplasia		2	2
Intestine			
NVL	3	5	6
Lymphoid hyperplasia	3	1	
Kidneys			
NVL	5	2	4
Microcalculi in pelvis	1	4	2
Thyroid			
NVL	6	5	5
C-cell hyperplasia		1	1
Bone Marrow			
NVL	6	5	3
Hemosiderosis		1	3

*Lungs collected from only five dogs.

Dog No. 65 (Male) Control PM NO. 73/2224

GROSS FINDINGS: Lungs congested, hemorrhage in duodenum about 3 inches long.

ORGAN WEIGHTS: (in grams)

.82	Thyroid	.61	Adrenal Gland, Left
67.0	Heart	.50	Adrenal Gland, Right
189.0	Liver	7.14	Gonad, Left
41.0	Spleen	6.95	Gonad, Right
21.4	Kidney, Left		
21.10	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesions (NVL).

Lungs: Very marked congestion and edema. Foci of mineralization, corpora amylacea, peribronchially.

Liver: Minimal extramedullary hematopoiesis; Gallbladder: NVL.

Spleen: Congestion.

Stomach: Not collected.

Intestine with Peyer's patch: Intestine: NVL
Peyer's patch: Reticulum cell hyperplasia; many macrophages containing necrotic cell remnants.

Kidneys: NVL

Adrenals: NVL

Thyroids, Parathyroids: NVL

Bone Marrow: Grade II, 50%. NVL

Brain: NVL

4 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 66 (Male) Control PM NO. 73/2225

GROSS FINDINGS: No gross lesions.

ORGAN WEIGHTS: (in grams)

.71	Thyroid	.47	Adrenal Gland (Left)
84.0	Heart	.32	Adrenal Gland (Right)
230	Liver	8.68	Gonad (Left)
83	Spleen	8.79	Gonad (Right)
26.54	Kidney (Left)		
25.70	Kidney (Right)		

MICROSCOPIC:

Heart: No visible lesions (NVL).

Lungs: NVL

Liver: Extramedullary hematopoiesis. No other lesions.

Spleen: Congestion.

Stomach: NVL

Intestine: NVL

Kidney: Protein droplets present in Bowman's spaces.

Adrenals: NVL

Thyroid: Missing.

Bone Marrow: Grade II, 25%. NVL

Brain: NVL

4 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 72 (Male) Control PM NO. 73/2226

GROSS FINDINGS: Congestion of the pelvic urethra.

ORGAN WEIGHTS: (in grams)

.71	Thyroid	.81	Adrenal Gland,Left
65	Heart	.74	Adrenal Gland,Right
227	Liver	8	Gonad, Left
18	Spleen	6	Gonad, Right
25	Kidney, Left		
25	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesions (NVL).

Lung: Marked congestion, slight edema.

Liver: NVL

Spleen: NVL

Stomach: NVL

Intestine: Marked hyperplasia of Peyers patches with increased mitotic figures.

Kidneys: NVL

Adrenals: NVL

Thyroid: NVL

Bone Marrow: Grade II, 55%. NVL

Brain: NVL

Prostate: NVL

Bladder: NVL

4 June 1974

Walter F. Loeb, V.M.D.,Ph.D.

Dog No. 37 (Female) Control PM NO. 73/2227

GROSS FINDINGS: Lungs are congested severely.

ORGAN WEIGHTS: (in grams)

.88	Thyroid	1.73	Adrenal Gland, Left
69	Heart	1.62	Adrenal Gland, Right
301	Liver	.71	Gonad, Left
34	Spleen	.73	Gonad, Right
24.22	Kidney, Left		
24.04	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesions (NVL).

Lung: Extreme congestion. Few small lymphocytic nodules.

Liver: NVL

Spleen: Contracted.

Stomach: NVL

Intestine: NVL

Kidney: NVL

Adrenals: NVL

Thyroid, Parathyroid: NVL

Bone Marrow: Grade II, 60%. NVL

Brain: NVL

4 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 43 (Female) Control PM NO. 73/2228

GROSS FINDINGS: No gross lesions.

ORGAN WEIGHTS: (in grams)

.75	Thyroid	.62	Adrenal Gland, Left
56.0	Heart	.50	Adrenal Gland, Right
204.0	Liver	.36	Gonad, Left
36.0	Spleen	.46	Gonad, Right
17.01	Kidney, Left		
17.84	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesions: NVL

Lung: There is one microscopic granuloma present. The etiologic agent is not evident.

Liver: Cross sections of individual portal veins and central veins (perhaps 10-20% of total) reveal very marked dilitation. These vessels have very thick fibrous or fibromuscular media and adventitia.

Spleen: Congested.

Stomach: NVL

Intestine: NVL

Kidney: NVL

Adrenals: NVL

Thyroid: In a portion of one thyroid, the acini are devoid of colloid, but contain material morphologically suggestive of serum.

Bone Marrow: Grade II, 30%. NVL

Brain: NVL

4 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 45 (Female) Control PM NO. 73/2229

GROSS FINDINGS: No gross lesions. One ascarid noted in small intestine.

ORGAN WEIGHTS: (in grams)

.66	Thyroid	.77	Adrenal Gland, Left
84.0	Heart	.62	Adrenal Gland, Right
253.0	Liver	1.00	Gonad, Left
71.0	Spleen	.79	Gonad, Right
26.78	Kidney, Left		
26.0	Kidney, Right		

MICROSCOPIC:

Heart: Medial thickening of some muscular arteries.

Lung: No visible lesions (NVL).

Liver: NVL

Spleen: Red pulp congested.

Stomach: NVL

Intestine: Lymphoid hyperplasia of Peyers patches.

Kidneys: Mineral deposits (microcalculi) in tubules of renal pelvis.

Adrenals: NVL

Thyroid, Parathyroid: NVL

Brain: NVL

Bone Marrow: Grade II, 40%. NVL

4 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 73 (Male) RDX-High 10 mg/kg PM NO. 73/2256

GROSS FINDINGS: Mesenteric lymph nodes hemorrhagic.

ORGAN WEIGHTS: (in grams)

.85	Thyroid	.56	Adrenal Gland, Left
91.	Heart	.64	Adrenal Gland, Right
275.	Liver	11.97	Gonad, Left
89.	Spleen	12.11	Gonad, Right
32.58	Kidney, Left		
32.46	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesions (NVL).

Lung: Anthracosis.

Liver: NVL

Spleen: NVL

Stomach: NVL

Intestines: Lymphoid hyperplasia of Peyer's patch.

Mesenteric Lymph Node: Congestion and edema.

Kidneys: Foci of mineralization in pelvis.

Adrenals: NVL.

Thyroid and Parathyroid: NVL

Bone Marrow: Grade II, 30%. Depletion of mature granulocytes.

Brain: NVL

6 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 74 (Male) RDX-High 10 mg/kg PM NO. 73/2257

GROSS FINDINGS: No gross lesions.

ORGAN WEIGHTS: (in grams)

1.0	Thyroid	.70	Adrenal Gland, Left
87.	Heart	.65	Adrenal Gland, Right
415.	Liver	12.28	Gonad, Left
95.	Spleen	11.38	Gonad, Right
30.64	Kidney, Left		
32.17	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesions (NVL).

Lung: NVL

Liver: Cells contain glycogen. NVL.

Spleen: Congestion, lymphocytic depletion. Necrosis of individual cells in center of lymphocytic nodules.

Stomach: NVL

Small Intestine: Cells of lamina pro ria are principally plasma cells rather than lymphocytes.

Kidneys: NVL

Adrenals: NVL

Thyroid: NVL

Bone Marrow: Grade II, 50%. Excess hemosiderin-filled macrophages. No other lesions.

Brain: NVL

6 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 55 (Male) RDX-High 10 mg/kg PM NO. 73/2259

GROSS FINDINGS: No gross lesions.

ORGAN WEIGHTS: (in grams)

1.19	Thyroid	.81	Adrenal Gland, Left
104.0	Heart	.88	Adrenal Gland, Right
300.0	Liver	9.90	Gonad, Left
132.0	Spleen	11.11	Gonad, Right
36.21	Kidney, Left		
35.71	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesions (NVL).

Lung: Carbon filled macrophages around bronchioles; foamy macrophages in and around bronchioles. Some mucus in bronchioles.

Liver: NVL

Spleen: Congestion, depletion of lymphocytes (marked).

Stomach: NVL

Intestine: NVL

Kidney: NVL

Adrenal: NVL

Thyroid and Parathyroid: NVL

Bone Marrow: Grade II, 40%, NVL.

Brain: (Cerebrum, cerebellum, brain stem, meninges, choroid plexus) - NVL

6 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 76 (Female) RDX-High 10 mg/kg PM NO. 73/2258

GROSS FINDINGS: Small intestine - diffuse congestion, focal hemorrhage, moderate. Mesenteric node enlarged.

ORGAN WEIGHTS: (in grams)

.94	Thyroid	.81	Adrenal Gland, Left
74.0	Heart	.85	Adrenal Gland, Right
259.0	Liver	.61	Gonad, Left
63.0	Spleen	.54	Gonad, Right
19.23	Kidney, Left		
19.93	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesions (NVL).

Lung: Congestion; some interstitial cellular infiltration.

Liver: Multifocal lymphoreticular infiltrate unrelated to lobular architecture, slight.

Spleen: Congestion.

Stomach: Missing

Intestine: NVL

Lymph Node (Mesenteric ?): Lymphoid hyperplasia and edema.

Kidney: Foci of mineralization in interstitium of renal medulla.

Adrenals: NVL

Thyroid: Diffuse C-cell hyperplasia, marked.

Bone Marrow: Grade II, 40%. Erythroid hyperplasia.

Brain: NVL

6 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 49 (Female) RDX-High 10 mg/kg PM NO. 73/2253

GROSS FINDINGS: No gross lesions.

ORGAN WEIGHTS: (in grams)

.59	Thyroid	.64	Adrenal Gland, Left
84.	Heart	.61	Adrenal Gland, Right
300.	Liver	.67	Gonad, Left
28.	Spleen	.73	Gonad, Right
20.	Kidney, Left		
20.	Kidney, Right		

MICROSCOPIC:

Heart: Area of hyalinization (amyloid?) under endocardium of papillary muscle, left ventricle.

Lung: Congestion and edema.

Liver: Liver parenchyma cells filled with glycogen.

Spleen: No visible lesions (NVL).

Stomach: NVL

Intestine: NVL

Kidney: Mineralized deposits (microcalculi) in tubules of pelvis.

Adrenal: NVL

Thyroid and Parathyroid: NVL

Brain: NVL

Bone Marrow: Grade II, 35%. NVL

6 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 50 (Female) RDX-High 10 mg/kg PM NO. 73/2254

GROSS FINDINGS: No gross lesions.

ORGAN WEIGHTS: (in grams)

.69	Thyroid	.61	Adrenal Gland, Left
63.	Heart	.70	Adrenal Gland, Right
225.	Liver	.44	Gonad, Left
35.	Spleen	.36	Gonad, Right
16.	Kidney, Left		
16.	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesions (NVL).

Lung: Edema, congestion.

Liver. Focal extramedullary hematopoiesis. Liver parenchyma cells filled with glycogen.

Spleen: NVL

Stomach: NVL

Intestine: NVL

Kidneys: Mineralized deposits (microcalculi) in tubules of renal pelvis

Adrenals: NVL

Thyroid: NVL. Parathyroid: One cyst (less than 1 mm diameter) present.

Brain: NVL

Bone Marrow: Grade II, 50%, NVL

6 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 69 (Male) TNT-High 1 mg/kg PM NO. 73/2262

GROSS FINDINGS: No gross lesions.

ORGAN WEIGHTS: (in grams)

.67	Thyroid	.88	Adrenal Gland, Left
87.0	Heart	.64	Adrenal Gland, Right
352.0	Liver	9.68	Gonad, Left
59.0	Spleen	10.15	Gonad, Right
25.56	Kidney, Left		
24.77	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesions (NVL).

Lung: NVL

Liver: Liver parenchyma cells filled with glycogen.

Spleen: NVL

Stomach: NVL

Intestine: NVL

Kidneys: NVL

Adrenals: NVL

Thyroid, Parathyroid: NVL

Brain: NVL

Bone Marrow: Grade II, 45%. NVL

6 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 70 (Male) TNT-High 1 mg/kg PM NO. 73/2263

GROSS FINDINGS: No gross lesions.

ORGAN WEIGHTS: (in grams)

1.22	Thyroid	.58	Adrenal Gland, Left
90.0	Heart	.60	Adrenal Gland, Right
296.0	Liver	10.04	Gonad, Left
41.0	Spleen	11.60	Gonad, Right
25.23	Kidney, Left		
24.79	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesions (NVL).

Lung: Alveolar walls are thickened by amorphous eosinophilic proteinaceous material and congestion.

Liver: NVL

Spleen: Congestion.

Stomach: NVL

Intestine and Pancreas: NVL

Kidneys: NVL

Adrenals: NVL

Thyroid, Parathyroid: NVL

Bone Marrow: Grade II, 40% NVL

Brain: NVL

6 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 71 (Male) TNT-High 1 mg/kg PM NO. 73/2264

GROSS FINDINGS: Parasite in small intestine.

ORGAN WEIGHTS: (in grams)

1.08	Thyroid	.75	Adrenal Gland, Left
83.0	Heart	.78	Adrenal Gland, Right
313.0	Liver	11.20	Gonad, Left
81.0	Spleen	10.74	Gonad, Right
23.78	Kidney, Left		
23.42	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesions (NVL).

Lung: Not collected at necropsy.

Liver: NVL

Spleen: NVL

Stomach: NVL

Intestine: NVL

Kidneys: Mineralized deposits (microcalculi) in pelvises of kidneys.

Adrenals: NVL

Thyroid, Parathyroid: NVL

Brain: NVL

Bone Marrow: Grade II, 40%. Normocellular bone marrow with hemosiderosis.

6 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 46 (Female) TNT-High 1 mg/kg PM NO. 73/2255

GROSS FINDINGS: Mesenteric nodes are hemorrhagic.

ORGAN WEIGHTS: (in grams)

.75	Thyroid	.59	Adrenal Gland, Left
67.0	Heart	.51	Adrenal Gland, Right
262.0	Liver	.56	Gonad, Left
73.0	Spleen	.60	Gonad, Right
25.79	Kidney, Left		
22.48	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesion (NVL).

Lung: NVL

Liver: NVL

Spleen: Congestion. Lymphoid depletion.

Stomach: NVL

Intestine: NVL

Mesenteric Lymph Node: Areas of lymphoid hyperplasia and areas of congestion.

Kidneys: NVL

Adrenals: NVL

Thyroid: Diffuse C-cell hyperplasia, mild. Parathyroid: NVL

Bone Marrow: Grade II, 65% Increase in hemosiderin. Hyperplasia.

Brain: NVL

7 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 47 (Female) TNT-High 1 mg/kg PM NO. 73/2260

GROSS FINDINGS: No gross lesions.

ORGAN WEIGHTS: (in grams)

.82	Thyroid	.58	Adrenal Gland, Left
67.0	Heart	.61	Adrenal Gland, Right
256.0	Liver	.70	Gonad, Left
71.0	Spleen	.50	Gonad, Right
20.36	Kidney, Left		
21.43	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesion (NVL).

Lung: NVL

Liver: NVL

Spleen: Congestion. Some of the lymphoid follicles are hypoplastic.

Stomach: NVL

Intestine: NVL

Kidneys: NVL

Adrenals: NVL

Thyroid, Parathyroid: NVL

Brain: NVL

Bone Marrow: Grade II, 30%. NVL

7 June 1974

Walter F. Loeb, V.M.D., Ph.D.

Dog No. 48 (Female) TNT-High 1 mg/kg PM NO. 73/2261

GROSS FINDINGS: No gross lesions.

ORGAN WEIGHTS:

.97	Thyroid	.54	Adrenal Gland, Left
66.0	Heart	.59	Adrenal Gland, Right
302.0	Liver	.62	Gonad, Left
63.0	Spleen	.67	Gonad, Right
23.0	Kidney, Left		
21.0	Kidney, Right		

MICROSCOPIC:

Heart: No visible lesion (NVL).

Lung: Two minute granulomas containing isotropic pigment.

Liver: Liver cells are swollen with finely vacuolated cytoplasm, probably glycogen. Kuppfer cells contain bilirubin.

Spleen: Congestion. Bile pigment in macrophages.

Stomach: NVL

Intestine: Plasma cells and eosinophils very abundant in lamina propria.

Kidney: Excessive protein in Bowman's spaces. Very minute mineral deposits in loops of Henle.

Adrenals: NVL

Thyroid: NVL

Bone Marrow: Grade II, 40% Excess hemosiderin-filled macrophages. Erythroid hyperplasia.

Brain: Some vacuolation of hippocampus.

7 June 1974

Walter F. Loeb, V.M.D., Ph.D.