

**Experiment Number:** 05131-03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
**Test Compound:** SODIUM FLUORIDE

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 03:24:09  
**First Dose M/F:** NA / NA  
**Lab:** NIEHS

<b>C Number:</b>	C55221C
<b>Lock Date:</b>	Not Entered.
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Male
<b>PWG Approval Date</b>	10/15/1997



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Route: DOSED WATER

Species/Strain: Rat/F 344/N

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Date Report Requested: 10/19/2014

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First Dose M/F: NA / NA

Lab: NIEHS

DAY ON TEST	ANIMAL ID																													
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>F 344/N Rat Male</b>	6	7	7	7	7	7	7	6	7	7	7	6	7	6	6	6	7	6	7	7	6	6	6	7	7	6	7	7	7	
<b>VEHICLE CONTROL</b>	9	3	3	3	3	3	3	9	3	3	3	3	3	9	9	9	3	9	3	3	9	1	6	3	3	9	2	1	3	3
	5	7	6	9	7	9	3	5	7	9	9	6	5	5	7	6	5	7	6	1	7	9	7	7	6	0	7	7	7	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	0	0	0	0	2	3	3	4	4	4	
	4	8	9	1	9	4	6	7	9	2	5	0	8	0	1	0	4	4	9	2	6	7	9	2	2	7	3	4	6	

Humerus, Leukemia Mononuclear, Metastatic, Uncertain Primary Site

X X X X X

Joint, Leukemia Mononuclear, Metastatic, Uncertain Primary Site

X X X

Joint, Lymphoma Malignant, Metastatic, Uncertain Primary Site

Maxilla, Lymphoma Malignant, Metastatic, Uncertain Primary Site

X

X

Tibia, Leukemia Mononuclear, Metastatic, Uncertain Primary Site

X X X X

X

Vertebra, Leukemia Mononuclear, Metastatic, Uncertain Primary Site

X

Vertebra, Lymphoma Malignant, Metastatic, Uncertain Primary Site

Integumentary System

NONE

Musculoskeletal System

Bone, Cranium

+

Squamous Cell Carcinoma

X

Bone, Femur

+ + + + +

+ + + + +

+ + +

+ +

Lymphoma Malignant

Bone, Humerus

+ + + + +

+ + + + +

+ +

+

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue







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First Dose M/F: NA / NA

Lab: NIEHS

F 344/N Rat Male VEHICLE CONTROL	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
		7	7	6	6	7	5	7	6	6	7	7	6	6	7	7	7	6	6	7	
	3	2	9	6	3	6	3	1	6	3	3	1	3	3	3	3	9	3	3		
	7	3	5	7	7	5	7	1	7	9	7	1	9	7	7	7	5	9	6		
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2		
	4	5	5	5	6	6	7	7	7	8	8	8	9	9	9	0	0	1	1		
	9	2	5	7	3	7	1	5	9	2	6	9	0	1	8	2	6	6	7		
		<b>*TOTALS</b>																			
Humerus, Leukemia Mononuclear, Metastatic, Uncertain Primary Site																			5		
Joint, Leukemia Mononuclear, Metastatic, Uncertain Primary Site																			4		
Joint, Lymphoma Malignant, Metastatic, Uncertain Primary Site																			X	1	
Maxilla, Lymphoma Malignant, Metastatic, Uncertain Primary Site																			X	1	
Tibia, Leukemia Mononuclear																			2		
Tibia, Leukemia Mononuclear, Metastatic, Uncertain Primary Site																			5		
Vertebra, Leukemia Mononuclear																			1		
Vertebra, Leukemia Mononuclear, Metastatic, Uncertain Primary Site																			1		
Vertebra, Lymphoma Malignant, Metastatic, Uncertain Primary Site																			X	1	
<b>Integumentary System</b>																					
NONE																					
<b>Musculoskeletal System</b>																					
Bone, Cranium																			1		
Squamous Cell Carcinoma																			1		
Bone, Femur		+	+	+		+		+	+	+	+	+		+		+					
Lymphoma Malignant																			X	1	
Bone, Humerus																			+	+	21

\* ..Total animals with tissue examined microscopically; Total animals with tumor  
+ ..Tissue examined microscopically  
X ..Lesion present  
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BLANK ..Not examined microscopically

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Lab: NIEHS

F 344/N Rat Male  
VEHICLE CONTROL

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7	7	6	6	7	5	7	6	6	7	7	6	6	7	7	7	6	6	7	
	3	2	9	6	3	6	3	1	6	3	3	1	3	3	3	3	9	3	3	
	7	3	5	7	7	5	7	1	7	9	7	1	9	7	7	7	5	9	6	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	
	4	5	5	5	6	6	7	7	7	8	8	8	9	9	9	0	0	1	1	
	9	2	5	7	3	7	1	5	9	2	6	9	0	1	8	2	6	6	7	
	<b>*TOTALS</b>																			
Bone, Intervertebral Disc																			+	4
Bone, Joint	+	+					+	+	+	+					+	+	+			23
Lymphoma Malignant																			X	1
Bone, Mandible																			+	1
Osteosarcoma																			X	1
Bone, Maxilla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Sarcoma																			X	1
Squamous Cell Carcinoma																			X	5
Bone, Pelvis																			+	1
Lymphoma Malignant																			X	1
Osteosarcoma																			X	1
Bone, Tibia	+	+					+	+	+	+					+	+	+			28
Lymphoma Malignant																			X	1
Bone, Vertebra																			+	14
Lymphoma Malignant																			X	1

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

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First Dose M/F: NA / NA

Lab: NIEHS

F 344/N Rat Male  
VEHICLE CONTROL

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	6	6	7	5	7	6	6	7	7	6	6	7	7	7	6	6	7
	3	2	9	6	3	6	3	1	6	3	3	1	3	3	3	3	9	3	3
	7	3	5	7	7	5	7	1	7	9	7	1	9	7	7	5	9	6	6
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	4	5	5	5	6	6	7	7	7	8	8	8	9	9	9	0	0	1	1
	9	2	5	7	3	7	1	5	9	2	6	9	0	1	8	2	6	6	7
	*TOTALS																		

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Leukemia Mononuclear																				7
Lymphoma Malignant																		X		1

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 Species/Strain: Rat/F 344/N

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
**Test Compound: SODIUM FLUORIDE**

Date Report Requested: 10/19/2014  
 Time Report Requested: 03:24:11  
 First Dose M/F: NA / NA  
 Lab: NIEHS

**F 344/N Rat Male**  
**250 PPM**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	7	7	7	7	7	7	7	7	5	7	7	5	7	6	7	7	7	6
	3	3	3	3	3	1	1	3	3	8	3	3	8	3	3	2	3	3	9
	9	6	6	6	6	2	6	6	6	3	6	6	3	6	9	0	6	6	5
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2
	5	5	6	6	7	8	8	8	9	9	9	0	0	0	0	1	1	2	2
	0	4	5	6	2	0	4	8	4	5	7	3	7	8	9	3	9	1	2
	<b>*TOTALS</b>																		

**Alimentary System**

Oral Mucosa																				5
Squamous Cell Carcinoma							X	X				X			X					5
Tooth, Incisor	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	49
Tooth, Molar	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	49

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

Tissue NOS																				1
Osteosarcoma																			X	1

**Genital System**

NONE

**Hematopoietic System**

Bone Marrow																			+	2
Femur, Leukemia Mononuclear																				1
Femur, Sarcoma, Metastatic, Uncertain Primary Site																			X	1

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 Time Report Requested: 03:24:11  
 First Dose M/F: NA / NA  
 Lab: NIEHS

**F 344/N Rat Male**  
**250 PPM**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	7	7	7	7	7	7	7	7	5	7	7	5	7	6	7	7	7	6
	3	3	3	3	3	1	1	3	3	8	3	3	8	3	3	2	3	3	9
	9	6	6	6	6	2	6	6	6	3	6	6	3	6	9	0	6	6	5
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2
	5	5	6	6	7	8	8	8	9	9	9	0	0	0	0	1	1	2	2
	0	4	5	6	2	0	4	8	4	5	7	3	7	8	9	3	9	1	2
	<b>*TOTALS</b>																		

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Leukemia Mononuclear																				1

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 Test Type: CHRONIC  
 Route: DOSED WATER  
 Species/Strain: Rat/F 344/N

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
**Test Compound: SODIUM FLUORIDE**

Date Report Requested: 10/19/2014  
 Time Report Requested: 03:24:11  
 First Dose M/F: NA / NA  
 Lab: NIEHS

**F 344/N Rat Male**  
**IRRAD WATER**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	5	5	7	7	6	6	7	7	6	7	7	7	6
	3	3	3	3	3	8	2	3	0	6	1	3	3	3	3	3	3	6
	6	9	9	9	9	3	7	9	2	7	1	6	9	9	9	9	9	7
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
	5	5	6	6	6	6	7	7	8	9	0	1	1	1	1	2	2	2
	3	6	0	2	8	9	3	4	3	9	5	0	4	5	8	3	4	5
	<b>*TOTALS</b>																	

**Alimentary System**

Oral Mucosa	+					+						+								4	
Squamous Cell Carcinoma	X																				2
Tooth, Incisor	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Tooth, Molar	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

Bone Marrow						+						+									5	
Femur, Leukemia Mononuclear													X									1
Femur, Leukemia Mononuclear, Metastatic, Uncertain Primary Site																				X		2
Humerus, Leukemia Mononuclear																					X	1

\* ..Total animals with tissue examined microscopically; Total animals with tumor  
 + ..Tissue examined microscopically  
 X ..Lesion present  
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Species/Strain: Rat/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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Date Report Requested: 10/19/2014

Time Report Requested: 03:24:12

First Dose M/F: NA / NA

Lab: NIEHS

F 344/N Rat Male  
250 PPM IRR FL

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	6	5	7	7	7	6	7	5	7	7	5	7	6	7	7	7	7
	3	3	1	5	3	3	3	9	3	5	1	3	8	3	9	3	0	3	2
	8	6	1	5	8	8	8	6	8	5	6	8	3	8	5	8	9	6	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	2	2	3	3	3	5	6	6	7	7	7	8	8	9	9	0	0	1	1
	4	5	1	6	9	8	1	4	0	6	8	1	7	2	6	0	4	1	2
	<b>*TOTALS</b>																		

Rib, Histiocytic Sarcoma, Metastatic, Uncertain Primary Site X 1

Tibia, Histiocytic Sarcoma, Metastatic, Uncertain Primary Site X 1

Vertebra, Histiocytic Sarcoma, Metastatic, Uncertain Primary Site X 1

**Integumentary System**

NONE

**Musculoskeletal System**

Bone, Femur + + + + + + + + + + + + + + + + 21

Bone, Humerus + + + + + + + + + + + + + + + + 14

Bone, Joint + + + + + + + + + + + + + + + + 17

Bone, Mandible + 1

Osteosarcoma X 1

Bone, Maxilla + + + + + + + + + + + + + + + + 50

Squamous Cell Carcinoma X 3

Bone, Radius 1

Bone, Rib + 1

Bone, Tibia + + + + + + + + + + + + + + + + 20

Bone, Vertebra + + + + + + + + + + + + + + + + 14

**Nervous System**

NONE

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 Lab: NIEHS

**F 344/N Rat Male**  
**250 PPM IRR FL**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	6	5	7	7	7	6	7	5	7	7	5	7	6	7	7	7	7
	3	3	1	5	3	3	3	9	3	5	1	3	8	3	9	3	0	3	2
	8	6	1	5	8	8	8	6	8	5	6	8	3	8	5	8	9	6	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	2	2	3	3	3	5	6	6	7	7	7	8	8	9	9	0	0	1	1
	4	5	1	6	9	8	1	4	0	6	8	1	7	2	6	0	4	1	2
	<b>*TOTALS</b>																		

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Histiocytic Sarcoma					X															1

\*\*\*END OF MALE DATA\*\*\*

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 + ..Tissue examined microscopically  
 X ..Lesion present  
 I ..Insufficient tissue

M ..Missing tissue  
 A ..Autolysis precludes evaluation  
 BLANK ..Not examined microscopically

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**Species/Strain:** Rat/F 344/N

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**Date Report Requested:** 10/19/2014

**Time Report Requested:** 03:24:12

**First Dose M/F:** NA / NA

**Lab:** NIEHS

**\*\* END OF REPORT \*\***

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+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

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BLANK ..Not examined microscopically