

1,4-ジオキサンのラット及びマウスを用いた
経口(混水)投与によるがん原性予備試験
(急性・2週間・13週間) 報告書

APPENDIX

(A1-1 ~ A6-4)

急性試験 STUDY NO. 0003 ; 0004

APPENDIX A 1-1

CLINICAL OBSERVATION (ACUTE STUDIES:SUMMARY)

RAT:MALE

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 1

Clinical sign	Group Name	Administration Week-day													
		0-0 1	0-0 2	0-0 3	0-0 4	1-1 1	1-2 1	1-3 1	1-4 1	1-5 1	1-6 1	1-7 1	2-1 1	2-2 1	2-3 1
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7143 mg/kg	0	0	1	1	7	8	8	8	8	8	8	8	8	8
	10000 mg/kg	0	0	4	5	10	-	-	-	-	-	-	-	-	-
LOCOMOTOR MOVEMENT DECR	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2603 mg/kg	10	10	9	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	10	9	7	6	6	1	0	0	0	0	0	0	0	0
	5102 mg/kg	10	10	10	10	10	8	0	0	0	0	0	0	0	0
	7143 mg/kg	9	9	9	7	7	1	0	0	0	0	0	0	0	0
	10000 mg/kg	9	10	10	6	5	-	-	-	-	-	-	-	-	-
PRONE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	1	0	1	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	5	2	1	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	3	6	6	5	0	0	0	0	0	0	0	0	0	0
	7143 mg/kg	3	4	3	1	0	0	0	0	0	0	0	0	0	0
	10000 mg/kg	4	3	2	0	0	-	-	-	-	-	-	-	-	-
LATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	1	2	0	0	0	0	0	0	0	0	0	0
	7143 mg/kg	4	4	5	4	5	0	0	0	0	0	0	0	0	0
	10000 mg/kg	5	6	8	6	5	-	-	-	-	-	-	-	-	-
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	9	7	9	9	8	0	0	0	0	0	0	0	0
	3644 mg/kg	2	6	6	8	9	10	2	0	0	0	0	0	0	0
	5102 mg/kg	4	5	5	5	5	8	8	2	0	0	0	0	0	0
	7143 mg/kg	0	3	2	3	3	2	1	1	0	0	0	0	0	0
	10000 mg/kg	1	1	1	1	1	-	-	-	-	-	-	-	-	-

STUDY NO. : 0003
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CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 2

Clinical sign	Group Name	Administration Week-day			
		2-4 1	2-5 1	2-6 1	2-7 1
DEATH	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	8	8	8	8
	10000 mg/kg	-	-	-	-
LOCOMOTOR MOVEMENT DECR	Control	2	2	2	2
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
PRONE	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
LATERAL	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
HUNCHBACK POSITION	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-

STUDY NO. : 0003
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CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 3

Clinical sign	Group Name	Administration Week-day																																
		0-0			1-1			1-2			1-3			1-4			1-5			1-6			1-7			2-1			2-2			2-3		
		1	2	3	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
BODY SAG	Control	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				
	2603 mg/kg	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				
	3644 mg/kg	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				
	5102 mg/kg	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				
	7143 mg/kg	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				
	10000 mg/kg	1	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
ATAXIC GAIT	Control	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					
	2603 mg/kg	0	1	2	1	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				
	3644 mg/kg	1	4	4	5	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				
	5102 mg/kg	3	5	5	3	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	7143 mg/kg	5	6	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	10000 mg/kg	2	2	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
PLEENING	Control	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				
	2603 mg/kg	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				
	3644 mg/kg	0	0	1	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				
	5102 mg/kg	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				
	7143 mg/kg	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				
	10000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
RIGHTING REPLEX REDUCE	Control	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				
	2603 mg/kg	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				
	3644 mg/kg	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				
	5102 mg/kg	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				
	7143 mg/kg	0	1	6	5	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	10000 mg/kg	3	6	7	4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
WEAKNESS	Control	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				
	2603 mg/kg	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				
	3644 mg/kg	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				
	5102 mg/kg	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				
	7143 mg/kg	0	0	0	5	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	10000 mg/kg	0	0	0	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

STUDY NO. : 0003
ANIMAL : RAT F344
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CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
BODY SAG	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
ATAXIC GAIT	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
PLEENING	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
RIGHTING REPLEX REDUCE	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
WEAKNESS	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		0-0 1	0-0 2	0-0 3	0-0 4	1-1 1	1-2 1	1-3 1	1-4 1	1-5 1	1-6 1	1-7 1	2-1 1	2-2 1	2-3 1
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	0	4	4	5	1	0	0	0	0	0	0
	7143 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	8	8	10	10	8	0	0	0	0	0	0	0	0
	3644 mg/kg	0	8	10	10	10	10	10	8	0	0	0	0	0	0
	5102 mg/kg	6	8	8	9	10	10	10	10	10	10	1	1	1	1
	7143 mg/kg	9	9	9	8	9	3	2	2	2	2	0	0	0	0
	10000 mg/kg	7	7	7	5	4	-	-	-	-	-	-	-	-	-
LACRYMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	3	3	2	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	4	5	1	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	6	3	4	2	5	2	0	0	1	0	0	0	0	0
	7143 mg/kg	1	3	5	5	7	1	0	0	0	0	0	0	0	0
	10000 mg/kg	2	1	6	6	5	-	-	-	-	-	-	-	-	-
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	0	0	0	4	1	1	1	1	1	1	1
	7143 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-
CLOSED EYELID	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	9	4	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	7	1	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	7	0	0	0	0	0	0	0	0	0	0	0	0	0
	7143 mg/kg	4	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 mg/kg	5	0	0	0	0	-	-	-	-	-	-	-	-	-

STUDY NO. : 0003
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CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
SOILED	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
PILOERECTION	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	1	1	1	1
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
LACRYMATION	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
GUM	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	1	1	1	1
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
CLOSED EYELID	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-

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CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		0-0 1	0-0 2	0-0 3	0-0 4	1-1 1	1-2 1	1-3 1	1-4 1	1-5 1	1-6 1	1-7 1	2-1 1	2-2 1	2-3 1
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	1	1	1	0	2	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	2	0	3	6	1	0	0	0	0	0	0	0
	7143 mg/kg	1	1	1	0	1	1	0	0	0	0	0	0	0	0
	10000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-
NOSE SEROUS DISCHARGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7143 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 mg/kg	0	1	1	0	0	-	-	-	-	-	-	-	-	-
CYANOSIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7143 mg/kg	0	1	1	3	6	1	0	0	0	0	0	0	0	0
	10000 mg/kg	0	2	4	5	4	-	-	-	-	-	-	-	-	-
RESPIRATORY INHIBITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	3	1	0	0	0	0	0	0	0	0	0
	7143 mg/kg	1	0	2	2	1	0	0	0	0	0	0	0	0	0
	10000 mg/kg	1	1	1	0	0	-	-	-	-	-	-	-	-	-
DYSPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7143 mg/kg	1	1	4	5	6	1	0	0	0	0	0	0	0	0
	10000 mg/kg	0	4	9	6	5	-	-	-	-	-	-	-	-	-

STUDY NO. : 0003
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CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
NOSE SEROUS DISCHARGE	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
CYANOSIS	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
RESPIRATORY INHIBITION	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
DYSPNEA	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 9

Clinical sign	Group Name	Administration Week-day													
		0-0 1	0-0 2	0-0 3	0-0 4	1-1 1	1-2 1	1-3 1	1-4 1	1-5 1	1-6 1	1-7 1	2-1 1	2-2 1	2-3 1
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	1	0	0	2	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	4	2	5	5	7	7	0	0	0	0	0	0	0	0
	7143 mg/kg	4	5	3	0	0	1	0	0	0	0	0	0	0	0
	10000 mg/kg	6	8	3	0	0	-	-	-	-	-	-	-	-	-
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7143 mg/kg	0	0	0	0	2	1	0	0	0	0	0	0	0	0
	10000 mg/kg	0	2	2	5	5	-	-	-	-	-	-	-	-	-

(HAN190)

BAIS 2

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 10

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
IRREGULAR BREATHING	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-
SUBNORMAL TEMP	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	0	0	0	0
	10000 mg/kg	-	-	-	-

(HAN180)

BAIS 2

APPENDIX A 1-2

CLINICAL OBSERVATION (ACUTE STUDIES:SUMMARY)

RAT:FEMALE

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 11

Clinical sign	Group Name	Administration Week-day													
		0-0 1	0-0 2	0-0 3	0-0 4	1-1 1	1-2 1	1-3 1	1-4 1	1-5 1	1-6 1	1-7 1	2-1 1	2-2 1	2-3 1
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	0	0	3	4	5	5	5	5	5	5	5
	7143 mg/kg	0	0	0	0	10	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	2	4	4	10	-	-	-	-	-	-	-	-	-
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	10	10	10	9	9	0	0	0	0	0	0	0	0	0
	3644 mg/kg	10	10	10	9	9	0	0	0	0	0	0	0	0	0
	5102 mg/kg	10	10	10	10	10	6	2	1	0	0	0	0	0	0
	7143 mg/kg	10	10	10	10	10	-	-	-	-	-	-	-	-	-
	10000 mg/kg	8	8	7	5	5	-	-	-	-	-	-	-	-	-
PRONE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	1	4	3	2	1	0	0	0	0	0	0	0	0	0
	5102 mg/kg	2	3	3	1	0	2	2	1	0	0	0	0	0	0
	7143 mg/kg	2	4	5	1	1	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	1	0	0	0	-	-	-	-	-	-	-	-	-
LATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	2	2	6	8	5	3	0	0	0	0	0	0	0	0
	7143 mg/kg	3	5	5	9	9	-	-	-	-	-	-	-	-	-
	10000 mg/kg	8	9	8	6	6	-	-	-	-	-	-	-	-	-
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	10	10	10	10	10	10	0	0	0	0	0	0	0	0
	3644 mg/kg	10	10	10	10	10	10	0	0	0	0	0	0	0	0
	5102 mg/kg	10	10	10	10	10	10	6	5	1	0	0	1	0	0
	7143 mg/kg	7	7	7	9	9	-	-	-	-	-	-	-	-	-
	10000 mg/kg	2	2	2	2	2	-	-	-	-	-	-	-	-	-

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 12

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
DEATH	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	5	5	5	5
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
PRONE	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
LATERAL	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
HUNCHBACK POSITION	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 13

Clinical sign	Group Name	Administration Week-day													
		0-0	0-0	0-0	0-0	1-1	1-2	1-3	1-4	1-5	1-6	1-7	2-1	2-2	2-3
		1	2	3	4	1	1	1	1	1	1	1	1	1	1
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	5	8	9	9	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	10	10	10	10	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	9	9	3	3	2	0	0	0	0	0	0	0	0	0
	7143 mg/kg	7	4	1	0	0	-	-	-	-	-	-	-	-	-
	10000 mg/kg	3	1	0	0	0	-	-	-	-	-	-	-	-	-
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	1	0	2	1	1	0	0	0	0	0	0	0	0	0
	7143 mg/kg	1	0	0	0	0	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-
RIGHTING REPLEX REDUCE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	9	8	8	2	0	0	0	0	0	0	0	0
	7143 mg/kg	0	1	10	10	10	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	0	7	6	6	-	-	-	-	-	-	-	-	-
WEAKNESS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	9	7	5	2	1	1	0	0	0	0	0	0
	7143 mg/kg	0	4	10	10	10	-	-	-	-	-	-	-	-	-
	10000 mg/kg	6	9	8	6	6	-	-	-	-	-	-	-	-	-
SOILED	Control	0	0	0	2	2	2	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	2	2	2	0	0	0	0	0	0	0	1
	3644 mg/kg	0	0	3	5	5	1	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	2	2	3	3	4	2	1	1	1	1	1	1
	7143 mg/kg	0	0	3	3	2	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	0	1	0	0	-	-	-	-	-	-	-	-	-

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 14

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
ATAXIC GAIT	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
PARALYTIC GAIT	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
RIGHTING REPLEX REDUCE	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
WEAKNESS	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
SOILED	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	1	1	1	1
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 15

Clinical sign	Group Name	Administration			Week-day											
		0-0	0-0	0-0	0-0	1-1	1-2	1-3	1-4	1-5	1-6	1-7	2-1	2-2	2-3	
		1	2	3	4	1	1	1	1	1	1	1	1	1	1	
PILOERECTION	Control	0	1	3	3	2	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	8	10	10	10	10	10	8	3	0	0	0	0	0	0	0
	3644 mg/kg	10	10	10	10	10	10	10	6	7	5	3	1	1	0	0
	5102 mg/kg	10	10	10	10	10	10	7	5	5	5	3	3	2	1	1
	7143 mg/kg	10	10	10	10	10	-	-	-	-	-	-	-	-	-	-
	10000 mg/kg	10	10	8	6	6	-	-	-	-	-	-	-	-	-	-
LACRYMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	8	9	5	4	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	10	10	8	7	2	0	1	0	0	0	0	0	0	0	0
	5102 mg/kg	7	8	10	10	10	6	2	1	1	0	0	1	0	0	0
	7143 mg/kg	10	7	10	10	10	-	-	-	-	-	-	-	-	-	-
	10000 mg/kg	6	6	5	5	5	-	-	-	-	-	-	-	-	-	-
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	0	0	0	2	0	1	1	0	0	0	0	0
	7143 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	0	1	0	0	-	-	-	-	-	-	-	-	-	-
EYE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0
	7143 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7143 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	0	1	1	1	-	-	-	-	-	-	-	-	-	-

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 16

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
PILOERECTOR	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
LACRYMATION	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
GUM	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
EYE HEMORRHAGIC DISCHA	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
EYE OPACITY	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 17

Clinical sign	Group Name	Administration Week-day													
		0-0 1	0-0 2	0-0 3	0-0 4	1-1 1	1-2 1	1-3 1	1-4 1	1-5 1	1-6 1	1-7 1	2-1 1	2-2 1	2-3 1
CLOSED EYELID	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	9	6	2	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	10	4	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	1	0	0	0	0	1	1	0	0	0	0	0	0
	7143 mg/kg	2	0	1	2	1	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	3	3	0	0	-	-	-	-	-	-	-	-	-
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	2	2	1	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	2	5	2	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	3	2	3	1	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	3	0	0	3	1	1	0	0	0	0	0	0
	7143 mg/kg	1	1	6	3	1	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	0	1	0	0	-	-	-	-	-	-	-	-	-
NOSE SEROUS DISCHARGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	1	1	0	0	0	0	0	0	0	0	0	0
	7143 mg/kg	1	1	1	2	2	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	1	1	1	1	-	-	-	-	-	-	-	-	-
CYANOSIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	1	3	3	3	2	0	0	0	0	0	0	0	0
	7143 mg/kg	0	5	9	9	10	-	-	-	-	-	-	-	-	-
	10000 mg/kg	4	9	8	6	6	-	-	-	-	-	-	-	-	-
RESPIRATORY INHIBITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	2	1	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	3	7	2	1	1	1	0	0	0	0	0	0
	7143 mg/kg	1	0	3	6	3	-	-	-	-	-	-	-	-	-
	10000 mg/kg	5	4	1	0	0	-	-	-	-	-	-	-	-	-

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 18

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
CLOSED EYELID	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
NOSE SEROUS DISCHARGE	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
CYANOSIS	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
RESPIRATORY INHIBITION	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 19

Clinical sign	Group Name	Administration Week-day													
		0-0 1	0-0 2	0-0 3	0-0 4	1-1 1	1-2 1	1-3 1	1-4 1	1-5 1	1-6 1	1-7 1	2-1 1	2-2 1	2-3 1
DYSPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	7	3	3	2	0	0	0	0	0	0	0	0
	7143 mg/kg	1	4	6	4	7	-	-	-	-	-	-	-	-	-
	10000 mg/kg	5	9	8	6	6	-	-	-	-	-	-	-	-	-
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	2	3	2	2	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	1	2	0	0	5	2	1	0	0	0	0	0	0	0
	7143 mg/kg	5	4	2	2	1	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	1	1	2	0	0	0	0	0	0	0	0	0	0	0
	7143 mg/kg	0	0	2	1	1	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7143 mg/kg	0	1	1	1	1	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	0	0	1	1	-	-	-	-	-	-	-	-	-
DIARRHEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	0	0	0	4	1	1	0	0	0	0	0
	7143 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 20

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
DYSPNEA	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
IRREGULAR BREATHING	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
RESPIRATORY SOUND ABNOR	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
NOISY	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-
DIARRHEA	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
	10000 mg/kg	-	-	-	-

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 21

Clinical sign	Group Name	Administration Week-day													
		0-0 1	0-0 2	0-0 3	0-0 4	1-1 1	1-2 1	1-3 1	1-4 1	1-5 1	1-6 1	1-7 1	2-1 1	2-2 1	2-3 1
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	1	9	8	5	2	1	1	0	0	0	0	0	0
	7143 mg/kg	0	5	10	10	10	-	-	-	-	-	-	-	-	-
	10000 mg/kg	4	9	8	6	6	-	-	-	-	-	-	-	-	-
SALIVATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2603 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3644 mg/kg	0	0	1	1	1	0	0	0	0	0	0	0	0	0
	5102 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7143 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-
	10000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 22

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
SUBNORMAL TEMP	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
10000 mg/kg	-	-	-	-	
SALIVATION	Control	0	0	0	0
	2603 mg/kg	0	0	0	0
	3644 mg/kg	0	0	0	0
	5102 mg/kg	0	0	0	0
	7143 mg/kg	-	-	-	-
10000 mg/kg	-	-	-	-	

(HAN190)

BATS 2

APPENDIX A 1-3

CLINICAL OBSERVATION (ACUTE STUDIES:SUMMARY)

MOUSE:MALE

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 1

Clinical sign	Group Name	Administration Week-day																																
		0-0			1-1			1-2			1-3			1-4			1-5			1-6			1-7			2-1			2-2			2-3		
		1	2	3	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
DEATH	Control	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				
	3151 mg/kg	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				
	4096 mg/kg	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				
	5325 mg/kg	0	0	0	0	0	3	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6				
	6923 mg/kg	0	0	0	0	8	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	9000 mg/kg	0	0	4	5	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
LOCOMOTOR MOVEMENT DECR	Control	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					
	3151 mg/kg	0	0	2	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				
	4096 mg/kg	4	3	1	2	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				
	5325 mg/kg	9	8	8	9	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	6923 mg/kg	9	9	9	9	9	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	9000 mg/kg	9	9	9	6	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
PRONE	Control	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				
	3151 mg/kg	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				
	4096 mg/kg	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				
	5325 mg/kg	1	2	3	3	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	6923 mg/kg	7	8	6	5	5	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	9000 mg/kg	5	6	6	4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
LATERAL	Control	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				
	3151 mg/kg	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				
	4096 mg/kg	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				
	5325 mg/kg	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	6923 mg/kg	0	0	2	2	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	9000 mg/kg	3	4	4	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
HUNCHBACK POSITION	Control	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				
	3151 mg/kg	2	3	1	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				
	4096 mg/kg	9	10	10	9	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				
	5325 mg/kg	8	8	8	8	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	6923 mg/kg	3	3	3	3	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	9000 mg/kg	1	1	1	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 2

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
DEATH	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	6	6	6	6
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
PRONE	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
LATERAL	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
HUNCHBACK POSITION	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 3

Clinical sign	Group Name	Administration Week-day													
		0-0 1	0-0 2	0-0 3	0-0 4	1-1 1	1-2 1	1-3 1	1-4 1	1-5 1	1-6 1	1-7 1	2-1 1	2-2 1	2-3 1
BODY SAG	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	0	0	0	3	0	0	0	0	0	0	0	0	0	0
	6923 mg/kg	0	0	0	1	1	0	-	-	-	-	-	-	-	-
	9000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	4	5	3	4	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	5	6	6	6	0	0	0	0	0	0	0	0	0	0
	6923 mg/kg	5	3	3	1	1	0	-	-	-	-	-	-	-	-
	9000 mg/kg	1	0	0	0	0	-	-	-	-	-	-	-	-	-
TREMOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6923 mg/kg	1	0	0	0	0	0	-	-	-	-	-	-	-	-
	9000 mg/kg	2	1	0	0	0	-	-	-	-	-	-	-	-	-
PLEENING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6923 mg/kg	0	0	0	0	0	0	-	-	-	-	-	-	-	-
	9000 mg/kg	1	0	0	0	0	-	-	-	-	-	-	-	-	-
RIGHTING REFLEX REDUCE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	0	0	1	1	4	2	0	0	0	0	0	0	0	0
	6923 mg/kg	0	4	5	6	7	2	-	-	-	-	-	-	-	-
	9000 mg/kg	2	8	9	6	5	-	-	-	-	-	-	-	-	-

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 4

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
BODY SAG	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
ATAXIC GAIT	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
TREMOR	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
PLEENING	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
RIGHTING REFLEX REDUCE	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 5

Clinical sign	Group Name	Administration Week-day													
		0-0 1	0-0 2	0-0 3	0-0 4	1-1 1	1-2 1	1-3 1	1-4 1	1-5 1	1-6 1	1-7 1	2-1 1	2-2 1	2-3 1
WEAKNESS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	0	0	0	0	4	3	0	0	0	0	0	0	0	0
	6923 mg/kg	0	0	1	4	4	2	-	-	-	-	-	-	-	-
	9000 mg/kg	1	3	9	6	5	-	-	-	-	-	-	-	-	-
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	4	7	7	5	0	0	0	0	0	1	0	0	0	1
	4096 mg/kg	9	10	10	10	1	0	0	0	0	0	0	0	0	1
	5325 mg/kg	9	10	10	10	7	4	0	0	0	0	0	0	0	0
	6923 mg/kg	9	9	9	9	10	2	-	-	-	-	-	-	-	-
	9000 mg/kg	10	10	10	6	5	-	-	-	-	-	-	-	-	-
LACRYMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6923 mg/kg	0	0	0	0	2	1	-	-	-	-	-	-	-	-
	9000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-
NOSE SEROUS DISCHARGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	6923 mg/kg	0	0	0	0	0	0	-	-	-	-	-	-	-	-
	9000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-
RESPIRATORY INHIBITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	0	0	2	2	1	0	0	0	0	0	0	0	0	0
	6923 mg/kg	0	1	3	2	2	0	-	-	-	-	-	-	-	-
	9000 mg/kg	0	0	1	0	0	-	-	-	-	-	-	-	-	-

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 6

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
WEAKNESS	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
PILOERECTOR	Control	0	0	0	0
	3151 mg/kg	0	1	2	0
	4096 mg/kg	0	0	2	2
	5325 mg/kg	0	0	1	1
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
LACRYMATION	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
NOSE SEROUS DISCHARGE	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
RESPIRATORY INHIBITION	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 7

Clinical sign	Group Name	Administration Week-day													
		0-0 1	0-0 2	0-0 3	0-0 4	1-1 1	1-2 1	1-3 1	1-4 1	1-5 1	1-6 1	1-7 1	2-1 1	2-2 1	2-3 1
DYSPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	0	0	1	0	4	3	0	0	0	0	0	0	0	0
	6923 mg/kg	0	1	2	5	5	2	-	-	-	-	-	-	-	-
	9000 mg/kg	3	6	9	6	5	-	-	-	-	-	-	-	-	-
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	0	2	1	3	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	4	7	5	8	1	0	0	0	0	0	0	0	0	0
	6923 mg/kg	7	6	5	3	3	0	-	-	-	-	-	-	-	-
	9000 mg/kg	7	5	1	0	0	-	-	-	-	-	-	-	-	-
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	6923 mg/kg	0	0	0	0	3	2	-	-	-	-	-	-	-	-
	9000 mg/kg	0	0	0	6	5	-	-	-	-	-	-	-	-	-

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 8

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
DYSPNEA	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
IRREGULAR BREATHING	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
SUBNORMAL TEMP	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-

(HAN190)

BAIS 2

APPENDIX A 1-4

CLINICAL OBSERVATION (ACUTE STUDIES:SUMMARY)

MOUSE:FEMALE

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 9

Clinical sign	Group Name	Administration Week-day																						
		0-0			1-1		1-2		1-3		1-4		1-5		1-6		1-7		2-1		2-2		2-3	
		0-0 1	0-0 2	0-0 3	0-0 4	1-1 1	1-2 1	1-3 1	1-4 1	1-5 1	1-6 1	1-7 1	2-1 1	2-2 1	2-3 1	2-1 1	2-2 1	2-3 1	2-1 1	2-2 1	2-3 1			
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5325 mg/kg	0	0	0	0	1	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
	6923 mg/kg	0	0	0	0	9	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	9000 mg/kg	0	0	0	1	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3151 mg/kg	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4096 mg/kg	5	9	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5325 mg/kg	9	9	10	10	7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6923 mg/kg	10	10	10	10	10	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	9000 mg/kg	9	9	9	9	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
LOCOMOTOR MOVEMENT INCR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5325 mg/kg	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6923 mg/kg	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	9000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PRONE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5325 mg/kg	0	0	1	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6923 mg/kg	4	6	7	6	6	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	9000 mg/kg	4	5	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
LATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3151 mg/kg	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5325 mg/kg	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6923 mg/kg	0	1	2	3	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	9000 mg/kg	2	5	10	10	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 10

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
DEATH	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	6	6	6	6
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
LOCOMOTOR MOVEMENT INCR	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
PRONE	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
LATERAL	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 11

Clinical sign	Group Name	Administration Week-day													
		0-0	0-0	0-0	0-0	1-1	1-2	1-3	1-4	1-5	1-6	1-7	2-1	2-2	2-3
		1	2	3	4	1	1	1	1	1	1	1	1	1	1
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	6	2	2	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	7	10	10	10	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	10	10	10	10	7	5	0	0	0	0	0	0	0	0
	6923 mg/kg	10	10	10	10	10	1	-	-	-	-	-	-	-	-
	9000 mg/kg	10	10	10	10	9	-	-	-	-	-	-	-	-	-
BODY SAG	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	0	0	0	0	2	1	0	0	0	0	0	0	0	0
	6923 mg/kg	0	0	0	0	0	0	-	-	-	-	-	-	-	-
	9000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	5	9	7	10	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	9	10	10	9	3	1	0	0	0	0	0	0	0	0
	6923 mg/kg	5	5	2	2	2	0	-	-	-	-	-	-	-	-
	9000 mg/kg	4	3	0	0	0	-	-	-	-	-	-	-	-	-
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6923 mg/kg	0	0	0	0	0	0	-	-	-	-	-	-	-	-
	9000 mg/kg	0	0	0	1	1	-	-	-	-	-	-	-	-	-
RIGHTING REPLEX REDUCE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5325 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6923 mg/kg	0	0	5	5	5	1	-	-	-	-	-	-	-	-
	9000 mg/kg	0	9	10	10	9	-	-	-	-	-	-	-	-	-

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 12

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
HUNCHBACK POSITION	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
BODY SAG	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
ATAXIC GAIT	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
PARALYTIC GAIT	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
RIGHTING REFLX REDUCE	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 13

Clinical sign	Group Name	Administration Week-day														
		0-0 1	0-0 2	0-0 3	0-0 4	1-1 1	1-2 1	1-3 1	1-4 1	1-5 1	1-6 1	1-7 1	2-1 1	2-2 1	2-3 1	
WEAKNESS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5325 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6923 mg/kg	0	1	5	6	6	1	-	-	-	-	-	-	-	-	
	9000 mg/kg	1	3	9	10	9	-	-	-	-	-	-	-	-	-	
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3151 mg/kg	0	4	5	4	0	0	0	0	0	0	0	0	0	0	
	4096 mg/kg	5	9	10	10	1	0	0	0	0	0	0	0	0	0	
	5325 mg/kg	10	10	10	10	9	5	0	0	0	0	0	0	0	0	
	6923 mg/kg	10	10	10	10	10	1	-	-	-	-	-	-	-	-	
	9000 mg/kg	10	10	10	10	9	-	-	-	-	-	-	-	-	-	
LACRYMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5325 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6923 mg/kg	0	0	0	0	1	1	-	-	-	-	-	-	-	-	
	9000 mg/kg	0	0	0	5	5	-	-	-	-	-	-	-	-	-	
CLOSED EYELID	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5325 mg/kg	0	0	0	1	1	1	0	0	0	0	0	0	0	0	
	6923 mg/kg	1	2	1	3	3	0	-	-	-	-	-	-	-	-	
	9000 mg/kg	1	2	1	0	0	-	-	-	-	-	-	-	-	-	
NOSE SEROUS DISCHARGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5325 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6923 mg/kg	0	0	1	0	0	0	-	-	-	-	-	-	-	-	
	9000 mg/kg	0	0	0	0	0	-	-	-	-	-	-	-	-	-	

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 14

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
WEAKNESS	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
PILOERECTION	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
LACRYMATION	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
CLOSED EYELID	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
NOSE SEROUS DISCHARGE	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 15

Clinical sign	Group Name	Administration Week-day														
		0-0 1	0-0 2	0-0 3	0-0 4	1-1 1	1-2 1	1-3 1	1-4 1	1-5 1	1-6 1	1-7 1	2-1 1	2-2 1	2-3 1	
RESPIRATORY INHIBITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5325 mg/kg	0	0	0	0	1	1	0	0	0	0	0	0	0	0	
	6923 mg/kg	0	0	6	3	3	0	-	-	-	-	-	-	-	-	
	9000 mg/kg	1	5	0	0	0	-	-	-	-	-	-	-	-	-	
DYSPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5325 mg/kg	0	0	0	0	1	1	0	0	0	0	0	0	0	0	
	6923 mg/kg	0	1	1	4	4	1	-	-	-	-	-	-	-	-	
	9000 mg/kg	0	3	10	10	9	-	-	-	-	-	-	-	-	-	
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4096 mg/kg	1	1	1	0	0	0	0	0	0	0	0	0	0	0	
	5325 mg/kg	0	0	3	4	4	3	0	0	0	0	0	0	0	0	
	6923 mg/kg	2	4	2	3	3	0	-	-	-	-	-	-	-	-	
	9000 mg/kg	6	2	0	0	0	-	-	-	-	-	-	-	-	-	
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3151 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4096 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5325 mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6923 mg/kg	0	0	0	1	2	1	-	-	-	-	-	-	-	-	
	9000 mg/kg	0	0	0	7	7	-	-	-	-	-	-	-	-	-	

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 16

Clinical sign	Group Name	Administration Week-day			
		2-4	2-5	2-6	2-7
		1	1	1	1
RESPIRATORY INHIBITION	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
DYSPNEA	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
IRREGULAR BREATHING	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-
SUBNORMAL TEMP	Control	0	0	0	0
	3151 mg/kg	0	0	0	0
	4096 mg/kg	0	0	0	0
	5325 mg/kg	0	0	0	0
	6923 mg/kg	-	-	-	-
	9000 mg/kg	-	-	-	-

(HAN190)

BAIS2

APPENDIX A 2-1

GROSS FINDINGS (ACUTE STUDIES:SUMMARY)

RAT:MALE:DEAD AND MORIBUND ANIMALS

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROSS FINDINGS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name NO. of Animals	Control 0 (%)	2603 mg/kg 0 (%)	3644 mg/kg 0 (%)	5102 mg/kg 0 (%)
lung/branch	red		- (-)	- (-)	- (-)	- (-)
	red patch/zone		- (-)	- (-)	- (-)	- (-)
thymus	red patch/zone		- (-)	- (-)	- (-)	- (-)
heart	dilated		- (-)	- (-)	- (-)	- (-)
gl stomach	red patch/zone		- (-)	- (-)	- (-)	- (-)
	erosion		- (-)	- (-)	- (-)	- (-)
	thin		- (-)	- (-)	- (-)	- (-)
stomach	fluid:brown		- (-)	- (-)	- (-)	- (-)
duodenum	red patch/zone		- (-)	- (-)	- (-)	- (-)
	fluid:brown		- (-)	- (-)	- (-)	- (-)
small intes	fluid:brown		- (-)	- (-)	- (-)	- (-)
liver	herniation		- (-)	- (-)	- (-)	- (-)
kidney	swollen		- (-)	- (-)	- (-)	- (-)
	anemic		- (-)	- (-)	- (-)	- (-)

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROSS FINDINGS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name NO. of Animals	7143 mg/kg 8 (%)	10000 mg/kg 10 (%)
lung/branch	red		2 (25)	0 (0)
	red patch/zone		2 (25)	0 (0)
thymus	red patch/zone		4 (50)	5 (50)
heart	dilated		2 (25)	0 (0)
gl stomach	red patch/zone		6 (75)	9 (90)
	erosion		1 (13)	0 (0)
	thin		0 (0)	1 (10)
stomach	fluid:brown		4 (50)	10 (100)
duodenum	red patch/zone		0 (0)	3 (30)
	fluid:brown		0 (0)	2 (20)
small intes	fluid:brown		7 (88)	8 (80)
liver	herniation		0 (0)	1 (10)
kidney	swollen		1 (13)	0 (0)
	anemic		1 (13)	0 (0)

APPENDIX A 2-2

GROSS FINDINGS (ACUTE STUDIES: SUMMARY)

RAT:FEMALE:DEAD AND MORIBUND ANIMALS

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

GROSS FINDINGS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name NO. of Animals	Control 0 (%)	2603 mg/kg 0 (%)	3644 mg/kg 0 (%)	5102 mg/kg 5 (%)
Lung/branch	red		- (-)	- (-)	- (-)	0 (0)
	red patch/zone		- (-)	- (-)	- (-)	2 (40)
	colored patch/zone		- (-)	- (-)	- (-)	1 (20)
thymus	red patch/zone		- (-)	- (-)	- (-)	1 (20)
heart	dilated		- (-)	- (-)	- (-)	0 (0)
esophagus	fluid:brown		- (-)	- (-)	- (-)	1 (20)
gl stomach	red		- (-)	- (-)	- (-)	0 (0)
	brown		- (-)	- (-)	- (-)	1 (20)
	red patch/zone		- (-)	- (-)	- (-)	4 (80)
	ulcer		- (-)	- (-)	- (-)	0 (0)
stomach	fluid:red		- (-)	- (-)	- (-)	0 (0)
	fluid:brown		- (-)	- (-)	- (-)	5 (100)
	fluid:black		- (-)	- (-)	- (-)	0 (0)
	fluid:transparent		- (-)	- (-)	- (-)	0 (0)
duodenum	red patch/zone		- (-)	- (-)	- (-)	0 (0)
	erosion		- (-)	- (-)	- (-)	0 (0)
	fluid:transparent		- (-)	- (-)	- (-)	0 (0)
small intes	fluid:red		- (-)	- (-)	- (-)	0 (0)
	fluid:brown		- (-)	- (-)	- (-)	4 (80)
	fluid:black		- (-)	- (-)	- (-)	0 (0)
cecum	fluid:brown		- (-)	- (-)	- (-)	1 (20)
kidney	enlarged		- (-)	- (-)	- (-)	3 (60)

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 2W)

PAGE : 4

Organ	Findings	Group Name NO. of Animals	7143 mg/kg 10 (%)	10000 mg/kg 10 (%)
lung/branch	red		1 (10)	0 (0)
	red patch/zone		4 (40)	1 (10)
	colored patch/zone		0 (0)	0 (0)
thymus	red patch/zone		7 (70)	7 (70)
heart	dilated		4 (40)	0 (0)
esophagus	fluid:brown		0 (0)	0 (0)
gl stomach	red		0 (0)	1 (10)
	brown		0 (0)	0 (0)
	red patch/zone		7 (70)	8 (80)
	ulcer		3 (30)	0 (0)
stomach	fluid:red		1 (10)	0 (0)
	fluid:brown		5 (50)	9 (90)
	fluid:black		3 (30)	0 (0)
	fluid:transparent		0 (0)	1 (10)
duodenum	red patch/zone		6 (60)	1 (10)
	erosion		1 (10)	0 (0)
	fluid:transparent		0 (0)	1 (10)
small intes	fluid:red		1 (10)	0 (0)
	fluid:brown		6 (60)	9 (90)
	fluid:black		3 (30)	0 (0)
cecum	fluid:brown		0 (0)	0 (0)
kidney	enlarged		0 (0)	0 (0)

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 2W)

PAGE : 5

Organ	Findings	Group Name NO. of Animals	Control 0 (%)	2603 mg/kg 0 (%)	3644 mg/kg 0 (%)	5102 mg/kg 5 (%)
kidney	swollen		- (-)	- (-)	- (-)	0 (0)
	red patch/zone		- (-)	- (-)	- (-)	1 (20)
	anemic		- (-)	- (-)	- (-)	4 (80)
urin bladd	urine:red		- (-)	- (-)	- (-)	1 (20)
adrenal	enlarged		- (-)	- (-)	- (-)	1 (20)
	red		- (-)	- (-)	- (-)	1 (20)

(HPT080)

BATS 2

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 2w)

Organ	Findings	Group Name NO. of Animals	7143 mg/kg 10 (%)	10000 mg/kg 10 (%)
kidney	swollen		4 (40)	0 (0)
	red patch/zone		0 (0)	0 (0)
	anemic		0 (0)	0 (0)
urin bladd	urine:red		0 (0)	0 (0)
adrenal	enlarged		0 (0)	0 (0)
	red		0 (0)	0 (0)

APPENDIX A 2-3

GROSS FINDINGS (ACUTE STUDIES:SUMMARY)

RAT:MALE:SACRIFICED ANIMALS

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (2W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control 10 (%)	2608 mg/kg 10 (%)	3644 mg/kg 10 (%)	5102 mg/kg 10 (%)
			ALL ANIMAL NON REMARKABLE	ALL ANIMAL NON REMARKABLE	ALL ANIMAL NON REMARKABLE	ALL ANIMAL NON REMARKABLE

(HPT080)

BAIS 2

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name	7143 mg/kg	10000 mg/kg
		NO. of Animals	2 (%)	0 (%)
			ALL ANIMAL NON REMARKABLE	ALL ANIMAL NON REMARKABLE

(HPT080)

APPENDIX A 2-4

GROSS FINDINGS (ACUTE STUDIES: SUMMARY)

RAT:FEMALE:SACRIFICED ANIMALS

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name NO. of Animals	Control 10 (%)	2603 mg/kg 10 (%)	3644 mg/kg 10 (%)	5102 mg/kg 5 (%)
lung/branch	red patch/zone		1 (10)	0 (0)	0 (0)	0 (0)
uterus	dilated lumen		2 (20)	2 (20)	1 (10)	0 (0)

(HPT080)

BAIS 2

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (2W)

PAGE : 2

Organ	Findings	Group Name NO. of Animals	7143 mg/kg 0 (%)	10000 mg/kg 0 (%)
lung/branch	red patch/zone		- (-)	- (-)
uterus	dilated lumen		- (-)	- (-)

(HPT080)

BAIS 2

APPENDIX A 2-5

GROSS FINDINGS (ACUTE STUDIES:SUMMARY)

MOUSE:MALE:DEAD AND MORIBUND ANIMALS

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 2W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control 0 (%)	3151 mg/kg 0 (%)	4096 mg/kg 0 (%)	5325 mg/kg 6 (%)
Lung/branch	red		- (-)	- (-)	- (-)	2 (33)
	edema		- (-)	- (-)	- (-)	1 (17)
heart	dilated		- (-)	- (-)	- (-)	0 (0)
gl stomach	red patch/zone		- (-)	- (-)	- (-)	1 (17)
stomach	red patch/zone		- (-)	- (-)	- (-)	1 (17)
	fluid:red		- (-)	- (-)	- (-)	0 (0)
	fluid:brown		- (-)	- (-)	- (-)	1 (17)
	fluid:transparent		- (-)	- (-)	- (-)	0 (0)
duodenum	red patch/zone		- (-)	- (-)	- (-)	0 (0)
	thick		- (-)	- (-)	- (-)	0 (0)
	fluid:red		- (-)	- (-)	- (-)	0 (0)
	fluid:brown		- (-)	- (-)	- (-)	2 (33)
small intes	fluid:brown		- (-)	- (-)	- (-)	0 (0)
Liver	anemic		- (-)	- (-)	- (-)	4 (67)
kidney	anemic		- (-)	- (-)	- (-)	3 (50)

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

GROSS FINDINGS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name NO. of Animals	6923 mg/kg 10 (%)	9000 mg/kg 10 (%)
lung/branch	red		8 (80)	5 (50)
	edema		0 (0)	0 (0)
heart	dilated		0 (0)	1 (10)
gl stomach	red patch/zone		8 (80)	10 (100)
stomach	red patch/zone		0 (0)	0 (0)
	fluid:red		2 (20)	0 (0)
	fluid:brown		6 (60)	0 (0)
	fluid:transparent		1 (10)	0 (0)
duodenum	red patch/zone		1 (10)	3 (30)
	thick		1 (10)	0 (0)
	fluid:red		1 (10)	0 (0)
	fluid:brown		1 (10)	0 (0)
small intes	fluid:brown		3 (30)	0 (0)
liver	anemic		0 (0)	0 (0)
kidney	anemic		0 (0)	0 (0)

APPENDIX A 2-6

GROSS FINDINGS (ACUTE STUDIES:SUMMARY)

MOUSE:FEMALE:DEAD AND MORIBUND ANIMALS

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

GROSS FINDINGS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name NO. of Animals	Control 0 (%)	3151 mg/kg 0 (%)	4086 mg/kg 0 (%)	5325 mg/kg 6 (%)
Lung/branch	red		- (-)	- (-)	- (-)	6 (100)
spleen	anemic		- (-)	- (-)	- (-)	3 (50)
forestomach	red patch/zone		- (-)	- (-)	- (-)	0 (0)
gl stomach	red patch/zone		- (-)	- (-)	- (-)	1 (17)
stomach	fluid:brown		- (-)	- (-)	- (-)	3 (50)
duodenum	red		- (-)	- (-)	- (-)	1 (17)
	red patch/zone		- (-)	- (-)	- (-)	0 (0)
	fluid		- (-)	- (-)	- (-)	0 (0)
	fluid:brown		- (-)	- (-)	- (-)	0 (0)
	fluid:black		- (-)	- (-)	- (-)	1 (17)
small intes	fluid:red		- (-)	- (-)	- (-)	2 (33)
	fluid:brown		- (-)	- (-)	- (-)	2 (33)
Liver	anemic		- (-)	- (-)	- (-)	4 (67)
kidney	anemic		- (-)	- (-)	- (-)	4 (67)

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

GROSS FINDINGS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name NO. of Animals	6923 mg/kg 10 (%)	9000 mg/kg 10 (%)
lung/branch	red		8 (80)	8 (80)
spleen	anemic		0 (0)	0 (0)
forestomach	red patch/zone		1 (10)	0 (0)
gl stomach	red patch/zone		8 (80)	9 (90)
stomach	fluid:brown		9 (90)	8 (80)
duodenum	red		1 (10)	0 (0)
	red patch/zone		0 (0)	1 (10)
	fluid		1 (10)	0 (0)
	fluid:brown		3 (30)	1 (10)
	fluid:black		0 (0)	0 (0)
small intes	fluid:red		0 (0)	0 (0)
	fluid:brown		5 (50)	2 (20)
liver	anemic		0 (0)	0 (0)
kidney	anemic		0 (0)	0 (0)

APPENDIX A 2-7

GROSS FINDINGS (ACUTE STUDIES:SUMMARY)

MOUSE:MALE:SACRIFICED ANIMALS

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (2W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control 10 (%)	3151 mg/kg 10 (%)	4096 mg/kg 10 (%)	5325 mg/kg 4 (%)
spleen	black patch/zone		0 (0)	1 (10)	0 (0)	0 (0)
testis	atrophic		0 (0)	0 (0)	1 (10)	0 (0)
semin ves	nodule		0 (0)	0 (0)	1 (10)	0 (0)

(HPT080)

BAIS 2

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (2W)

PAGE : 2

Organ	Findings	Group Name NO. of Animals	6923 mg/kg 0 (%)	9000 mg/kg 0 (%)
spleen	black patch/zone		- (-)	- (-)
testis	atrophic		- (-)	- (-)
semin ves	nodule		- (-)	- (-)

(HPT080)

BAIS 2

APPENDIX A 2-8

GROSS FINDINGS (ACUTE STUDIES:SUMMARY)

MOUSE:FEMALE:SACRIFICED ANIMALS

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (2W)

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control 10 (%)	3151 mg/kg 10 (%)	4096 mg/kg 10 (%)	5325 mg/kg 4 (%)
spleen	black patch/zone		0 (0)	0 (0)	1 (10)	1 (25)
ovary	cyst		1 (10)	1 (10)	0 (0)	0 (0)
uterus	dilated lumen		5 (50)	4 (40)	4 (40)	3 (75)

(HPT080)

BAIS 2

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name NO. of Animals	6923 mg/kg 0 (%)	9000 mg/kg 0 (%)
spleen	black patch/zone		- (-)	- (-)
ovary	cyst		- (-)	- (-)
uterus	dilated lumen		- (-)	- (-)

(HPT080)

BAIS 2

APPENDIX A 3-1

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (ACUTE STUDIES;SUMMARY)

RAT:MALE:DEAD AND MORIBUND ANIMALS

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name Control No. of Animals 0				2603 mg/kg 0				3644 mg/kg 0				5102 mg/kg 0			
		<1> (%)	<2> (%)	<3> (%)	<4> (%)	<1> (%)	<2> (%)	<3> (%)	<4> (%)	<1> (%)	<2> (%)	<3> (%)	<4> (%)	<1> (%)	<2> (%)	<3> (%)	<4> (%)
[Respiratory system]																	
lung/branch	congestion	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	hemorrhage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	edema:perivascular	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
[Hematopoietic system]																	
spleen	congestion	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
[Digestive system]																	
stomach	erosion:glandular stomach	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
[Urinary system]																	
kidney	tubular necrosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	hydropic change:proximal tubule	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name 7143 mg/kg				10000 mg/kg			
		No. of Animals 3				3			
		<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]									
lung/branch	congestion	1	0	0	0	1	0	0	0
		(33)	(0)	(0)	(0)	(33)	(0)	(0)	(0)
	hemorrhage	1	0	0	0	0	0	0	0
		(33)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	edema:perivascular	1	0	0	0	1	0	0	0
		(33)	(0)	(0)	(0)	(33)	(0)	(0)	(0)
[Hematopoietic system]									
spleen	congestion	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(33)	(0)	(0)	(0)
[Digestive system]									
stomach	erosion:glandular stomach	1	0	0	0	2	0	0	0
		(33)	(0)	(0)	(0)	(67)	(0)	(0)	(0)
[Urinary system]									
kidney	tubular necrosis	1	0	0	0	0	0	0	0
		(33)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hydropic change:proximal tubule	0	1	0	0	0	0	0	0
		(0)	(33)	(0)	(0)	(0)	(0)	(0)	(0)

APPENDIX A 3-2

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (ACUTE STUDIES;SUMMARY)

RAT:FEMALE:DEAD AND MORIBUND ANIMALS

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name Control				2603 mg/kg				3644 mg/kg				5102 mg/kg			
		No. of Animals				0				0				3			
		<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]																	
lung/branch	congestion	-	-	-	-	-	-	-	-	-	-	-	-	1	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(33)	(0)	(0)	(0)
	hemorrhage	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(0)	(0)	(0)
	edema:perivascular	-	-	-	-	-	-	-	-	-	-	-	-	1	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(33)	(0)	(0)	(0)
[Hematopoietic system]																	
thymus	hemorrhage	-	-	-	-	-	-	-	-	-	-	-	-	1	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(33)	(0)	(0)	(0)
	karyorrhexis	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	1
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(0)	(0)	(33)
[Circulatory system]																	
heart	hemorrhage	-	-	-	-	-	-	-	-	-	-	-	-	2	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(67)	(0)	(0)	(0)
[Digestive system]																	
stomach	erosion:glandular stomach	-	-	-	-	-	-	-	-	-	-	-	-	2	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(67)	(0)	(0)	(0)
liver	vacuolic change:central	-	-	-	-	-	-	-	-	-	-	-	-	1	0	1	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(33)	(0)	(33)	(0)
[Urinary system]																	
kidney	tubular necrosis	-	-	-	-	-	-	-	-	-	-	-	-	0	0	3	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(0)	(100)	(0)

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name 7143 mg/kg No. of Animals 2				10000 mg/kg 3			
		<1> (%)	<2> (%)	<3> (%)	<4> (%)	<1> (%)	<2> (%)	<3> (%)	<4> (%)
[Respiratory system]									
lung/branch	congestion	1 (50)	0 (0)	0 (0)	0 (0)	2 (67)	0 (0)	0 (0)	0 (0)
	hemorrhage	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	edema:perivascular	1 (50)	0 (0)	0 (0)	0 (0)	2 (67)	0 (0)	0 (0)	0 (0)
[Hematopoietic system]									
thymus	hemorrhage	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	karyorrhexis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Circulatory system]									
heart	hemorrhage	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Digestive system]									
stomach	erosion:glandular stomach	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	1 (33)	0 (0)	0 (0)
liver	vacuolic change:central	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Urinary system]									
kidney	tubular necrosis	0 (0)	0 (0)	0 (0)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Control No. of Animals				2603 mg/kg				3644 mg/kg				5102 mg/kg				
		<1> (%)	<2> (%)	<3> (%)	<4> (%)	<1> (%)	<2> (%)	<3> (%)	<4> (%)	<1> (%)	<2> (%)	<3> (%)	<4> (%)	<1> (%)	<2> (%)	<3> (%)	<4> (%)	
[Urinary system]																		
kidney	hydropic change:proximal tubule	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	0 (0)	0 (0)	1 (33)	0 (0)
[Endocrine system]																		
adrenal	hemorrhage	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	0 (0)	1 (33)	0 (0)	0 (0)
[Special sense organs/appandage]																		
eye	inflammation	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	1 (33)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name 7143 mg/kg No. of Animals 2				10000 mg/kg 3			
		<1> (%)	<2> (%)	<3> (%)	<4> (%)	<1> (%)	<2> (%)	<3> (%)	<4> (%)
[Urinary system]									
kidney	hydropic change:proximal tubule	0 (0)	1 (50)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Endocrine system]									
adrenal	hemorrhage	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Special sense organs/appandage]									
eye	inflammation	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

APPENDIX A 3-3

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (ACUTE STUDIES, SUMMARY)

RAT:MALE:SACRIFICED ANIMALS

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name Control				2603 mg/kg				3644 mg/kg				5102 mg/kg			
		No. of Animals 2				2				2				2			
		<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Hematopoietic system]																	
spleen	extramedullary hematopoiesis	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(50)	(0)	(0)	(0)
[Urinary system]																	
kidney	regeneration proximal tubule	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name 7143 mg/kg				Group Name 10000 mg/kg			
		No. of Animals 2				No. of Animals 0			
		<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

[Hematopoietic system]

spleen	extramedullary hematopoiesis	0	0	0	0	-	-	-	-
		(0)	(0)	(0)	(0)	(-)	(-)	(-)	(-)

[Urinary system]

kidney	regeneration proximal tubule	1	0	0	0	-	-	-	-
		(50)	(0)	(0)	(0)	(-)	(-)	(-)	(-)

APPENDIX A 3-4

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (ACUTE STUDIES:SUMMARY)

RAT:FEMALE:SACRIFICED ANIMALS

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name Control				2603 mg/kg				3644 mg/kg				5102 mg/kg			
		No. of Animals 2				2				2				2			
		<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]																	
lung/branch	hemorrhage	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(50)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Urinary system]																	
kidney	mineralization	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(50)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	regeneration proximal tubule	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name 7143 mg/kg				Group Name 10000 mg/kg			
		No. of Animals 0				No. of Animals 0			
		<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

[Respiratory system]

lung/branch	hemorrhage	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

[Urinary system]

kidney	mineralization	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	regeneration proximal tubule	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

APPENDIX A 3-5

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (ACUTE STUDIES; SUMMARY)

MOUSE:MALE:DEAD AND MORIBUND ANIMALS

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name Control				3151 mg/kg				4096 mg/kg				5325 mg/kg			
		No. of Animals				0				0				2			
		<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]																	
lung/branch	congestion	-	-	-	-	-	-	-	-	-	-	-	-	2	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(100)	(0)	(0)	(0)
[Hematopoietic system]																	
bone marrow	congestion	-	-	-	-	-	-	-	-	-	-	-	-	1	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(50)	(0)	(0)	(0)
lymph node	karyorrhexis	-	-	-	-	-	-	-	-	-	-	-	-	1	0	1	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(50)	(0)	(50)	(0)
thymus	karyorrhexis	-	-	-	-	-	-	-	-	-	-	-	-	0	0	1	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(0)	(50)	(0)
spleen	congestion	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(0)	(0)	(0)
	karyorrhexis	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(50)	(50)	(0)	(0)
[Urinary system]																	
kidney	hydronephrosis	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(0)	(0)	(0)
	tubular necrosis	-	-	-	-	-	-	-	-	-	-	-	-	0	1	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(50)	(0)	(0)
[Endocrine system]																	
pituitary	congestion	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(0)	(0)	(0)

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name 6923 mg/kg				Group Name 9000 mg/kg			
		No. of Animals 2				No. of Animals 2			
		<1> (%)	<2> (%)	<3> (%)	<4> (%)	<1> (%)	<2> (%)	<3> (%)	<4> (%)
[Respiratory system]									
Lung/branch	congestion	1 (50)	0 (0)	0 (0)	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)
[Hematopoietic system]									
bone marrow	congestion	2 (100)	0 (0)	0 (0)	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)
Lymph node	karyorrhesis	1 (50)	1 (50)	0 (0)	0 (0)	1 (50)	0 (0)	0 (0)	0 (0)
thymus	karyorrhesis	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
spleen	congestion	0 (0)	0 (0)	0 (0)	0 (0)	1 (50)	0 (0)	0 (0)	0 (0)
	karyorrhesis	0 (0)	2 (100)	0 (0)	0 (0)	1 (50)	0 (0)	0 (0)	0 (0)
[Urinary system]									
kidney	hydronephrosis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (50)	0 (0)	0 (0)
	tubular necrosis	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Endocrine system]									
pituitary	congestion	1 (50)	0 (0)	0 (0)	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name Control				3151 mg/kg				4096 mg/kg				5325 mg/kg			
		No. of Animals 0				0				0				2			
		<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Endocrine system]																	
adrenal	congestion	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(0)	(0)	(0)
[Nervous system]																	
brain	congestion	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(0)	(0)	(0)

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name 6923 mg/kg				Group Name 9000 mg/kg			
		No. of Animals 2				No. of Animals 2			
		<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

[Endocrine system]

adrenal	congestion	1	0	0	0	2	0	0	0
		(50)	(0)	(0)	(0)	(100)	(0)	(0)	(0)

[Nervous system]

brain	congestion	1	0	0	0	1	0	0	0
		(50)	(0)	(0)	(0)	(50)	(0)	(0)	(0)

APPENDIX A 3-6

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (ACUTE STUDIES:SUMMARY)

MOUSE:FEMALE:DEAD AND MORIBUND ANIMALS

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name Control				3151 mg/kg				4096 mg/kg				5325 mg/kg			
		No. of Animals				0				0				1			
		<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Hematopoietic system]																	
bone marrow	congestion	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(0)	(0)	(0)
lymph node	karyorrhexis	-	-	-	-	-	-	-	-	-	-	-	-	0	1	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(100)	(0)	(0)
thymus	karyorrhexis	-	-	-	-	-	-	-	-	-	-	-	-	0	1	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(100)	(0)	(0)
spleen	karyorrhexis	-	-	-	-	-	-	-	-	-	-	-	-	0	1	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(100)	(0)	(0)
[Digestive system]																	
stomach	hemorrhage:glandular stomach	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(0)	(0)	(0)
[Urinary system]																	
kidney	tubular necrosis	-	-	-	-	-	-	-	-	-	-	-	-	0	1	0	0
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(0)	(100)	(0)	(0)

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name 6923 mg/kg No. of Animals				9000 mg/kg 2			
		<1> (%)	<2> (%)	<3> (%)	<4> (%)	<1> (%)	<2> (%)	<3> (%)	<4> (%)
[Hematopoietic system]									
bone marrow	congestion	1 (50)	0 (0)	0 (0)	0 (0)	1 (50)	0 (0)	0 (0)	0 (0)
Lymph node	karyorrhexis	1 (50)	0 (0)	1 (50)	0 (0)	1 (50)	0 (0)	0 (0)	0 (0)
thymus	karyorrhexis	0 (0)	1 (50)	1 (50)	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)
spleen	karyorrhexis	0 (0)	1 (50)	1 (50)	0 (0)	1 (50)	0 (0)	0 (0)	0 (0)
[Digestive system]									
stomach	hemorrhage:glandular stomach	1 (50)	0 (0)	0 (0)	0 (0)	1 (50)	0 (0)	0 (0)	0 (0)
[Urinary system]									
kidney	tubular necrosis	0 (0)	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

APPENDIX A 3-7

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (ACUTE STUDIES:SUMMARY)

MOUSE:MALE:SACRIFICED ANIMALS

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name Control				3151 mg/kg				4096 mg/kg				5325 mg/kg			
		No. of Animals 2				2				2				2			
		<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Hematopoietic system]																	
thymus	hemorrhage	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Digestive system]																	
stomach	ulcer:forestomach	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(50)	(0)	(0)	(0)
[Reproductive system]																	
testis	atrophy	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Body cavities]																	
adipose	congestion	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name 6923 mg/kg				Group Name 9000 mg/kg			
		No. of Animals 0				No. of Animals 0			
		<1> (%)	<2> (%)	<3> (%)	<4> (%)	<1> (%)	<2> (%)	<3> (%)	<4> (%)
[Hematopoietic system]									
thymus	hemorrhage	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
[Digestive system]									
stomach	ulcer:forestomach	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
[Reproductive system]									
testis	atrophy	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
[Body cavities]									
adipose	congestion	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

APPENDIX A 3-8

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (ACUTE STUDIES:SUMMARY)

MOUSE:FEMALE:SACRIFICED ANIMALS

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name Control				3151 mg/kg				4096 mg/kg				5325 mg/kg			
		No. of Animals 2				2				2				2			
		<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Hematopoietic system]																	
spleen	deposit of melanin	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(50)	(0)	(0)	(0)
[Digestive system]																	
stomach	erosion:forestomach	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(50)	(0)	(0)	(0)

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name 6923 mg/kg				Group Name 9000 mg/kg			
		No. of Animals				No. of Animals			
		<1>	<2>	<3>	<4>	<1>	<2>	<3>	<4>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

[Hematopoietic system]

spleen	deposit of melanin	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

[Digestive system]

stomach	erosion:forestomach	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

APPENDIX A 4-1

IDENTITY AND PURITY IN THE ACUTE STUDIES OF 1,4-DIOXANE

PERFORMED AT THE JAPAN BIOASSAY LABORATORY

IDENTITY AND PURITY IN THE ACUTE STUDIES OF 1,4-DIOXANE PERFORMED AT THE
JAPAN BIOASSAY LABORATORY

Lot no. WKE1190

1. Physical properties	<u>Determined</u>	<u>Literature Values</u>
Appearance:	Clear, colorless liquid	Clear, colorless liquid
Boiling point:	101°C	101°C (ENCYCLOPAEDIA Published by Kyooritsu CO., LTD.)

2. Spectral data

Infrared

Instrument: Hitachi 270-30

Cell: Fixed thickness Cell (NaCl)

Slit: Medium

Results: Wave Number
(CM^{-1})

610	610
860~900	860~900
1050~1140	1050~1140
1260	1260
1295	1290
1370	1365
1460	1455
1700~1740	1700~1740
2700~3000	2690~3000

(Sadtler handbook
by Sadtler Research
Laboratories, Inc.)

3. Gas Chromatography

Instrument: Shimazu GC-9A

Column: SBS-1

Column Temperature: 80°C

Flow Rate: 20ml/min

Detector: Hydrogen flame ionization (FID)

Injection Volume: 1 μ l

Results: Only one major peak

Peak No.	Retention Time (min)	Retention Time Relative to Major Peak	Area (percent of Major peak)
1	3.822	1.00	100

C. Conclusions: The results of the boiling point agreed with the literature values. Impurity was not detected in test substance by Gas chromatography. The infrared spectra agreed with the literature values.

APPENDIX A 4-2

STABILITY IN THE ACUTE STUDIES OF 1,4-DIOXANE

AT THE JAPAN BIOASSAY LABORATORY

STABILITY IN THE ACUTE STUDIES OF 1,4-DIOXANE AT THE JAPAN BIOASSAY LABORATORY

Lot no. WKE1190

1. Sample storage: 1,4-Dioxane were stored for about 1 year at 5°C.

2. Physical properties Previous determined of test (02/21/83) After determined of test (03/04/83)

Appearance: Clear, colorless liquid Clear, colorless liquid

Boiling point: 101°C 101°C

3. Spectral data

Infrared

Instrument: Hitachi 270-30

Cell: Fixed thickness Cell(NaCl)

Slit: Medium

Results: Wave Number
(CM^{-1})

610	610
860~900	860~900
1050~1140	1050~1140
1260	1260
1295	1295
1370	1370
1460	1460
1700~1740	1700~1740
2700~3000	2700~3000

4. Gas Chromatography

Instrument: Shimadzu GC-9A

Column: SBS-1

Column Temperature: 80°C

Flow Rate: 20ml/min

Detector: Hydrogen Flame ionization(FID)

Injection Volume: 1 μ l

Results: Only one major peak

Date	Retention Time (min)	Retention Time Relative to Major Peak	Area (percent of Major peak)
02/21/83	3.822	1.00	100
03/04/83	3.825	1.00	100

C. Conclusions: The results of the Boiling point agreed with the previous determine of test Values. Impurity was not detected in test substance by Gas chromatography. The infrared spectra agreed with the previous determine of test Values.

Consequently, 1,4-dioxane was stable as the chemical when stored for about 1 year at temperatures to 5°C.

APPENDIX A 4-3

RESULTS OF ANALYSIS OF FORMULATED DRINKING WATER
IN THE ACUTE STUDIES OF 1,4-DIOXANE

RESULTS OF ANALYSIS OF FORMULATED DRINKING WATER IN THE ACUTE STUDIES OF 1,4-DIOXANE

(Rat)

Date Mixed	Concentration of 1,4-Dioxane in drinking water for Target Concentration(ppm)				
	1000000(a)	714300(a)	510200(a)	364400(a)	260300(a)
02/21/83	998000(99.8)	692600(97.0)	515200(101.0)	364800(100.1)	263600(101.3)

(a) Determined as a percent of target

(Mouse)

Date Mixed	Concentration of 1,4-Dioxane in drinking water for Target Concentration(ppm)				
	900000(a)	692300(a)	532500(a)	364400(a)	315100(a)
02/22/83	903000(100.3)	691300(99.9)	530500(99.62)	409600(100.8)	315700(101.2)

(a) Determined as a percent of target

APPENDIX A 5-1

GROSS FINDINGS (ACUTE STUDIES:INDIVIDUAL)

RAT:MALE

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

GROUP NAME : Control

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 1

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1001	SCHEDULED	3-1		NON-REMARKABLE
1002	SCHEDULED	3-1		NON-REMARKABLE
1003	SCHEDULED	3-1		NON-REMARKABLE
1004	SCHEDULED	3-1		NON-REMARKABLE
1005	SCHEDULED	3-1		NON-REMARKABLE
1006	SCHEDULED	3-1		NON-REMARKABLE
1007	SCHEDULED	3-1		NON-REMARKABLE
1008	SCHEDULED	3-1		NON-REMARKABLE
1009	SCHEDULED	3-1		NON-REMARKABLE
1010	SCHEDULED	3-1		NON-REMARKABLE

():Comment

(HPT045)

BAIS2

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 2603 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 2

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1101	SCHEDULED	3-1		NON-REMARKABLE
1102	SCHEDULED	3-1		NON-REMARKABLE
1103	SCHEDULED	3-1		NON-REMARKABLE
1104	SCHEDULED	3-1		NON-REMARKABLE
1105	SCHEDULED	3-1		NON-REMARKABLE
1106	SCHEDULED	3-1		NON-REMARKABLE
1107	SCHEDULED	3-1		NON-REMARKABLE
1108	SCHEDULED	3-1		NON-REMARKABLE
1109	SCHEDULED	3-1		NON-REMARKABLE
1110	SCHEDULED	3-1		NON-REMARKABLE

():Comment

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 3644 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 3

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1201	SCHEDULED	3-1		NON-REMARKABLE
1202	SCHEDULED	3-1		NON-REMARKABLE
1203	SCHEDULED	3-1		NON-REMARKABLE
1204	SCHEDULED	3-1		NON-REMARKABLE
1205	SCHEDULED	3-1		NON-REMARKABLE
1206	SCHEDULED	3-1		NON-REMARKABLE
1207	SCHEDULED	3-1		NON-REMARKABLE
1208	SCHEDULED	3-1		NON-REMARKABLE
1209	SCHEDULED	3-1		NON-REMARKABLE
1210	SCHEDULED	3-1		NON-REMARKABLE

():Comment

(HPT045)

BAIS2

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 5102 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 4

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
1301	SCHEDULED	3-1		NON-REMARKABLE
1302	SCHEDULED	3-1		NON-REMARKABLE
1303	SCHEDULED	3-1		NON-REMARKABLE
1304	SCHEDULED	3-1		NON-REMARKABLE
1305	SCHEDULED	3-1		NON-REMARKABLE
1306	SCHEDULED	3-1		NON-REMARKABLE
1307	SCHEDULED	3-1		NON-REMARKABLE
1308	SCHEDULED	3-1		NON-REMARKABLE
1309	SCHEDULED	3-1		NON-REMARKABLE
1310	SCHEDULED	3-1		NON-REMARKABLE

():Comment

(HPT045)

BAIS2

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 7143 mg/kg

GROSS FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 5

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1401	DEAD	1-1	gl stomach	red patch/zone
			small intes	fluid:brown,black
1402	DEAD	1-1	thymus	red patch/zone
			gl stomach	red patch/zone
			small intes	fluid:brown
1403	SCHEDULED	3-1		NON-REMARKABLE
1404	SCHEDULED	3-1		NON-REMARKABLE
1405	DEAD	1-1	lung/branch	red patch/zone
			thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown
			small intes	fluid:brown
1406	DEAD	1-1	lung/branch	red patch/zone
			heart	dilated,atrium,ventricle,right
			gl stomach	erosion
			small intes	fluid:brown
1407	DEAD	0-0	small intes	fluid:brown,black
1408	DEAD	1-1	lung/branch	red,dark
			thymus	red patch/zone
			heart	dilated,atrium,right

():Comment

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 7143 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 6

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1409	DEAD	1-2	gl stomach	red patch/zone
			stomach	fluid:brown
			small intes	fluid:brown
			lung/branch	red,dark
			thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown
1410	DEAD	1-1	small intes	fluid:brown
			kidney	swollen//anemic
			gl stomach	red patch/zone
			stomach	fluid:brown

():Comment

(HPT045)

BAIS2

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 10000 mg/kg

GROSS FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 7

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
1501	DEAD	0-0	gl stomach	red patch/zone
			stomach	fluid:brown,black
			small intes	fluid:brown,black
1502	DEAD	0-0	gl stomach	red patch/zone
			stomach	fluid:brown,black
			small intes	fluid:brown,black
1503	DEAD	0-0	gl stomach	red patch/zone
			stomach	fluid:brown
			small intes	fluid:brown,black
1504	DEAD	0-0	gl stomach	red patch/zone
			stomach	fluid:brown,black
			small intes	fluid:brown
1505	DEAD	1-1	thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown
1506	DEAD	1-1	thymus	red patch/zone
			stomach	fluid:brown
			small intes	fluid:brown
1507	DEAD	0-0	gl stomach	red patch/zone//thin
			stomach	fluid:brown,black

():Comment

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 10000 mg/kg

GROSS FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 8

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1508	DEAD	1-1	duodenum	red patch/zone,upper
			small intes	fluid:brown,black
			thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown
			duodenum	red patch/zone
1509	DEAD	1-1	small intes	fluid:brown
			thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown
			duodenum	fluid:brown
			small intes	fluid:brown
1510	DEAD	1-1	thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown
			duodenum	red patch/zone//fluid:brown
			Liver	herniation

(): Comment

APPENDIX A 5-2

GROSS FINDINGS (ACUTE STUDIES:INDIVIDUAL)

RAT:FEMALE

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : Control

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 9

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2001	SCHEDULED	3-1	lung/branch	red patch/zone,1,mm
2002	SCHEDULED	3-1		NON-REMARKABLE
2003	SCHEDULED	3-1		NON-REMARKABLE
2004	SCHEDULED	3-1	uterus	dilated lumen
2005	SCHEDULED	3-1		NON-REMARKABLE
2006	SCHEDULED	3-1		NON-REMARKABLE
2007	SCHEDULED	3-1	uterus	dilated lumen
2008	SCHEDULED	3-1		NON-REMARKABLE
2009	SCHEDULED	3-1		NON-REMARKABLE
2010	SCHEDULED	3-1		NON-REMARKABLE

():Comment

(HPT045)

BAIS2

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 2603 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 10

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2101	SCHEDULED	3-1		NON-REMARKABLE
2102	SCHEDULED	3-1		NON-REMARKABLE
2103	SCHEDULED	3-1		NON-REMARKABLE
2104	SCHEDULED	3-1	uterus	dilated lumen
2105	SCHEDULED	3-1		NON-REMARKABLE
2106	SCHEDULED	3-1		NON-REMARKABLE
2107	SCHEDULED	3-1		NON-REMARKABLE
2108	SCHEDULED	3-1		NON-REMARKABLE
2109	SCHEDULED	3-1	uterus	dilated lumen
2110	SCHEDULED	3-1		NON-REMARKABLE

():Comment

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 3644 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 11

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2201	SCHEDULED	3-1		NON-REMARKABLE
2202	SCHEDULED	3-1		NON-REMARKABLE
2203	SCHEDULED	3-1		NON-REMARKABLE
2204	SCHEDULED	3-1		NON-REMARKABLE
2205	SCHEDULED	3-1		NON-REMARKABLE
2206	SCHEDULED	3-1		NON-REMARKABLE
2207	SCHEDULED	3-1		NON-REMARKABLE
2208	SCHEDULED	3-1		NON-REMARKABLE
2209	SCHEDULED	3-1		NON-REMARKABLE
2210	SCHEDULED	3-1	uterus	dilated lumen

():Comment

(HPT045)

BAIS2

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 5102 mg/kg

GROSS FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 12

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2301	SCHEDULED	3-1		NON-REMARKABLE
2302	DEAD	1-3	Lung/branch	red patch/zone, a few
			esophagus	fluid:brown,red, dark
			gl stomach	brown, dark, mucosa
			stomach	fluid:brown,red, dark
			small intes	fluid:brown,red, dark
			cecum	fluid:brown,red, dark
			kidney	anemic//enlarged
			adrenal	red
2303	SCHEDULED	3-1		NON-REMARKABLE
2304	SCHEDULED	3-1		NON-REMARKABLE
2305	DEAD	1-2	Lung/branch	red patch/zone//colored pat, brown, green, 3, mm
			thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown
2306	DEAD	1-2	gl stomach	red patch/zone
			stomach	fluid:brown, dark
			small intes	fluid:brown, dark
			kidney	anemic//red patch/zone//enlarged
			urin bladd	urine:red

(): Comment

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 5102 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 13

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2307	DEAD	1-2	stomach	red patch/zone
			stomach	fluid:brown,dark
			small intes	fluid:brown,dark
			kidney	anemic//enlarged
2308	SCHEDULED	3-1		NON-REMARKABLE
2309	SCHEDULED	3-1		NON-REMARKABLE
2310	DEAD	1-4	stomach	red patch/zone
			stomach	fluid:brown,dark
			small intes	fluid:brown,dark
			kidney	anemic
			adrenal	enlarged

():Comment

(HPT045)

BAIS2

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 7143 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 14

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
2401	DEAD	1-1	lung/branch	red,dark
			stomach	fluid:red,dark
			small intes	fluid:red,dark,upper
2402	DEAD	1-1	thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown,dark
			duodenum	red patch/zone
2403	DEAD	1-1	small intes	fluid:brown,dark,upper
			thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown,dark
2404	DEAD	1-1	duodenum	red patch/zone
			small intes	fluid:brown,dark,upper
			thymus	red patch/zone
			gl stomach	red patch/zone
2405	DEAD	1-1	stomach	fluid:brown
			small intes	fluid:brown,upper
			thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown,dark

():Comment

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 7143 mg/kg

GROSS FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 15

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2406	DEAD	1-1	duodenum	red patch/zone
			small intes	fluid:brown,dark,upper
			lung/branch	red patch/zone
			thymus	red patch/zone
			heart	dilated,atrium,right
			gl stomach	ulcer
			stomach	fluid:black
			duodenum	red patch/zone
2407	DEAD	1-1	small intes	fluid:brown,upper
			kidney	swollen
			thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown,dark
2408	DEAD	1-1	duodenum	red patch/zone
			small intes	fluid:brown,dark,upper
			lung/branch	red patch/zone
			heart	dilated,ventricle,atrium,right
			gl stomach	ulcer//red patch/zone
			stomach	fluid:black
			small intes	fluid:black,upper

():Comment

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 7143 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 16

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
			kidney	swollen
2409	DEAD	1-1	lung/branch	red patch/zone
			heart	dilated,atrium,right
			gl stomach	red patch/zone
			stomach	fluid:black
			duodenum	red patch/zone//erosion
			small intes	fluid:black
			kidney	swollen
2410	DEAD	1-1	lung/branch	red patch/zone
			thymus	red patch/zone
			heart	dilated,atrium,ventricle,right
			gl stomach	ulcer
			small intes	fluid:black,upper
			kidney	swollen

():Comment

(HPT045)

BAIS2

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 10000 mg/kg

GROSS FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 17

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2501	DEAD	0-0	gl stomach	red,mucosa
			stomach	fluid:brown
			small intes	fluid:brown,upper
2502	DEAD	1-1	thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown,black
			small intes	fluid:brown,black,upper
2503	DEAD	1-1	lung/branch	red patch/zone
			thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown,dark
			small intes	fluid:brown,dark,upper
2504	DEAD	1-1	thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown,dark
			small intes	fluid:brown,dark,upper
2505	DEAD	0-0	gl stomach	red patch/zone
			stomach	fluid:transparent
			duodenum	fluid:transparent
2506	DEAD	1-1	thymus	red patch/zone

():Comment

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 10000 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 18

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2507	DEAD	1-1	gl stomach	red patch/zone
			stomach	fluid:brown,dark
			small intes	fluid:brown,dark
			thymus	red patch/zone
			stomach	fluid:brown,dark
			duodenum	red patch/zone
2508	DEAD	1-1	small intes	fluid:brown,dark,upper
			thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown
2509	DEAD	0-0	small intes	fluid:brown,upper
			thymus	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown
2510	DEAD	0-0	small intes	fluid:brown,upper
			gl stomach	red patch/zone
			stomach	fluid:brown,red
			small intes	fluid:brown,red,upper

():Comment

APPENDIX A 5-3

GROSS FINDINGS (ACUTE STUDIES:INDIVIDUAL)

MOUSE:MALE

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROUP NAME : Control

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 1

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1001	SCHEDULED	3-1		NON-REMARKABLE
1002	SCHEDULED	3-1		NON-REMARKABLE
1003	SCHEDULED	3-1		NON-REMARKABLE
1004	SCHEDULED	3-1		NON-REMARKABLE
1005	SCHEDULED	3-1		NON-REMARKABLE
1006	SCHEDULED	3-1		NON-REMARKABLE
1007	SCHEDULED	3-1		NON-REMARKABLE
1008	SCHEDULED	3-1		NON-REMARKABLE
1009	SCHEDULED	3-1		NON-REMARKABLE
1010	SCHEDULED	3-1		NON-REMARKABLE

():Comment

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 3151 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 2

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1101	SCHEDULED	3-1		NON-REMARKABLE
1102	SCHEDULED	3-1		NON-REMARKABLE
1103	SCHEDULED	3-1		NON-REMARKABLE
1104	SCHEDULED	3-1		NON-REMARKABLE
1105	SCHEDULED	3-1		NON-REMARKABLE
1106	SCHEDULED	3-1		NON-REMARKABLE
1107	SCHEDULED	3-1		NON-REMARKABLE
1108	SCHEDULED	3-1	spleen	black patch/zone, 2, mm
1109	SCHEDULED	3-1		NON-REMARKABLE
1110	SCHEDULED	3-1		NON-REMARKABLE

(): Comment

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 4096 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 3

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1201	SCHEDULED	3-1		NON-REMARKABLE
1202	SCHEDULED	3-1		NON-REMARKABLE
1203	SCHEDULED	3-1		NON-REMARKABLE
1204	SCHEDULED	3-1		NON-REMARKABLE
1205	SCHEDULED	3-1	testis	atrophic, left
			semin ves	nodule, red
1206	SCHEDULED	3-1		NON-REMARKABLE
1207	SCHEDULED	3-1		NON-REMARKABLE
1208	SCHEDULED	3-1		NON-REMARKABLE
1209	SCHEDULED	3-1		NON-REMARKABLE
1210	SCHEDULED	3-1		NON-REMARKABLE

(): Comment

(HPT045)

BAIS2

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 5325 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 4

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1301	DEAD	1-2	duodenum	fluid:brown,dark
			liver	anemic
			kidney	anemic
1302	DEAD	1-1		NON-REMARKABLE
1303	SCHEDULED	3-1		NON-REMARKABLE
1304	SCHEDULED	3-1		NON-REMARKABLE
1305	SCHEDULED	3-1		NON-REMARKABLE
1306	DEAD	1-1	lung/branch	red,dark
			stomach	fluid:brown,pale//red patch/zone
1307	DEAD	1-2	liver	anemic
			kidney	anemic
1308	DEAD	1-1	lung/branch	edema
			sl stomach	red patch/zone
			liver	anemic
1309	SCHEDULED	3-1		NON-REMARKABLE
1310	DEAD	1-2	lung/branch	red,dark, lung hilar region
			duodenum	fluid:brown,dark
			liver	anemic
			kidney	anemic

():Comment

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 6923 mg/kg

GROSS FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 5

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1401	DEAD	1-1	gl stomach	red patch/zone
			stomach	fluid:brown,pale
			small intes	fluid:brown,dark
1402	DEAD	1-1	lung/branch	red,dark
			stomach	fluid:brown,pale
			duodenum	fluid:brown,dark//thick,white,upper,5,mm//red patch/zone,mucosa,upper,5,mm
1403	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone
			stomach	fluid:red,pale
1404	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone
			stomach	fluid:transparent
1405	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone
			stomach	fluid:red,dark
1406	DEAD	1-1	duodenum	fluid:red,dark
			lung/branch	red,dark
			gl stomach	red patch/zone
1407	DEAD	1-1	stomach	fluid:brown,pale
			lung/branch	red,dark

(): Comment

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 6923 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 6

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
			gl stomach	red patch/zone
			stomach	fluid:brown,pale
1408	DEAD	1-2	lung/branch	red,dark
			small intes	fluid:brown,black
1409	DEAD	1-2	gl stomach	red patch/zone
			stomach	fluid:brown,black
			small intes	fluid:brown,black
1410	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone
			stomach	fluid:brown,pale

():Comment

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 9000 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 7

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1501	DEAD	0-0	st stomach	red patch/zone
1502	DEAD	1-1	lung/branch	red,dark
			st stomach	red patch/zone
1503	DEAD	1-1	lung/branch	red,dark
			st stomach	red patch/zone
1504	DEAD	0-0	heart	dilated
			st stomach	red patch/zone
			duodenum	red patch/zone,upper
1505	DEAD	1-1	lung/branch	red,dark
			st stomach	red patch/zone
1506	DEAD	1-1	lung/branch	red,dark
			st stomach	red patch/zone
1507	DEAD	0-0	st stomach	red patch/zone
1508	DEAD	0-0	st stomach	red patch/zone
			duodenum	red patch/zone,upper
1509	DEAD	0-0	st stomach	red patch/zone
			duodenum	red patch/zone,upper
1510	DEAD	1-1	lung/branch	red,dark
			st stomach	red patch/zone

():Comment

APPENDIX A 5-4

GROSS FINDINGS (ACUTE STUDIES:INDIVIDUAL)

MOUSE:FEMALE

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : Control

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 8

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2001	SCHEDULED	3-1	uterus	dilated lumen
2002	SCHEDULED	3-1		NON-REMARKABLE
2003	SCHEDULED	3-1		NON-REMARKABLE
2004	SCHEDULED	3-1	uterus	dilated lumen
2005	SCHEDULED	3-1		NON-REMARKABLE
2006	SCHEDULED	3-1	uterus	dilated lumen
2007	SCHEDULED	3-1	ovary	cyst, left
			uterus	dilated lumen
2008	SCHEDULED	3-1	uterus	dilated lumen
2009	SCHEDULED	3-1		NON-REMARKABLE
2010	SCHEDULED	3-1		NON-REMARKABLE

():Comment

(HPT045)

BAIS2

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 3151 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 9

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2101	SCHEDULED	3-1	ovary	cyst,4,mm,right
2102	SCHEDULED	3-1	uterus	dilated lumen
2103	SCHEDULED	3-1		NON-REMARKABLE
2104	SCHEDULED	3-1	uterus	dilated lumen
2105	SCHEDULED	3-1		NON-REMARKABLE
2106	SCHEDULED	3-1		NON-REMARKABLE
2107	SCHEDULED	3-1		NON-REMARKABLE
2108	SCHEDULED	3-1		NON-REMARKABLE
2109	SCHEDULED	3-1	uterus	dilated lumen
2110	SCHEDULED	3-1	uterus	dilated lumen

():Comment

(HPT045)

BAIS2

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 4096 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 10

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2201	SCHEDULED	3-1		NON-REMARKABLE
2202	SCHEDULED	3-1	uterus	dilated lumen
2203	SCHEDULED	3-1		NON-REMARKABLE
2204	SCHEDULED	3-1	uterus	dilated lumen
2205	SCHEDULED	3-1		NON-REMARKABLE
2206	SCHEDULED	3-1	spleen	black patch/zone,3,mm
2207	SCHEDULED	3-1	uterus	dilated lumen
2208	SCHEDULED	3-1		NON-REMARKABLE
2209	SCHEDULED	3-1		NON-REMARKABLE
2210	SCHEDULED	3-1	uterus	dilated lumen

():Comment

(HPT045)

BAIS2

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 5325 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 11

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2301	SCHEDULED	3-1	spleen	black patch/zone,2,mm,1,mm
2302	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone
			stomach	fluid:brown,pale
2303	DEAD	1-2	lung/branch	red,dark
			spleen	anemic
			duodenum	fluid:black
			liver	anemic
			kidney	anemic
2304	DEAD	1-2	lung/branch	red,dark
			stomach	fluid:brown,black
			small intes	fluid:brown,black,upper
			liver	anemic
2305	SCHEDULED	3-1	uterus	dilated lumen
2306	DEAD	1-2	lung/branch	red,dark
			spleen	anemic
			small intes	fluid:red,dark
			kidney	anemic
2307	SCHEDULED	3-1	uterus	dilated lumen
2308	DEAD	1-2	lung/branch	red,dark

():Comment

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 5325 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 12

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
			spleen	anemic
			duodenum	red,mucosa
			small intes	fluid:red,dark
			liver	anemic
			kidney	anemic
2309	DEAD	1-2	lung/branch	red,dark
			stomach	fluid:brown,dark
			small intes	fluid:brown,dark
			liver	anemic
			kidney	anemic
2310	SCHEDULED	3-1	uterus	dilated lumen

():Comment

(HPT045)

BAIS2

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 6923 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 13

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2401	DEAD	1-1	gl stomach	red patch/zone
			stomach	fluid:brown,pale
			small intes	fluid:brown,black
2402	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone
			stomach	fluid:brown,pale
			duodenum	fluid:brown
2403	DEAD	1-1	lung/branch	red,dark
			stomach	fluid:brown,pale
			small intes	fluid:brown,black
2404	DEAD	1-1	lung/branch	red,dark
			forestomach	red patch/zone
			gl stomach	red patch/zone
			stomach	fluid:brown,pale
			small intes	fluid:brown,black
2405	DEAD	1-2	lung/branch	red,dark
			stomach	fluid:brown,pale
			duodenum	fluid:brown,dark
2406	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone

():Comment

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 6923 mg/kg

GROSS FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 14

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
			small intes	fluid:brown,black
2407	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone
			stomach	fluid:brown,pale
2408	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone
			stomach	fluid:brown,pale
			small intes	fluid:brown,dark
2409	DEAD	1-1	gl stomach	red patch/zone
			stomach	fluid:brown,pale
			duodenum	fluid,brown//red,upper
2410	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone
			stomach	fluid:brown,pale
			duodenum	fluid:brown,dark

():Comment

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 9000 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 15

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
2501	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone
			stomach	fluid:brown,pale
			duodenum	fluid:brown,pale
2502	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone
			stomach	fluid:brown,pale
			small intes	fluid:brown,dark
2503	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone
			stomach	fluid:brown,pale
2504	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone
			stomach	fluid:brown,pale
			small intes	fluid:brown,black
2505	DEAD	1-1	lung/branch	red,dark
			gl stomach	red patch/zone
			stomach	fluid:brown,pale
2506	DEAD	0-0	gl stomach	red patch/zone
			duodenum	red patch/zone

():Comment

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 9000 mg/kg

GROSS FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 16

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2507	DEAD	1-1	lung/branch	red,dark
			sl stomach	red patch/zone
			stomach	fluid:brown,pale
2508	DEAD	1-1	lung/branch	red,dark
			sl stomach	red patch/zone
			stomach	fluid:brown,pale
2509	DEAD	1-1		NON-REMARKABLE
2510	DEAD	1-1	lung/branch	red,dark
			sl stomach	red patch/zone
			stomach	fluid:brown,pale

():Comment

(HPT045)

BAISZ

APPENDIX A 6-1

HISTOLOGICAL FINDINGS (ACUTE STUDIES:INDIVIDUAL)

RAT:MALE

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : Control

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
1001	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
testis	NON-REMARKABLE			
brain	NON-REMARKABLE			
1002	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

GROUP NAME : Control

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2w)

PAGE : 2

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1002	SCHEDULED	3-1	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

(HPT050)

BAIS2

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 2603 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1101	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
testis	NON-REMARKABLE			
brain	NON-REMARKABLE			
1102	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 2603 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1102	SCHEDULED	3-1	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 3644 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 5

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
1201	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
testis	NON-REMARKABLE			
brain	NON-REMARKABLE			
1202	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 3644 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 6

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1202	SCHEDULED	3-1	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

(HPT050)

BAIS2

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 5102 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2w)

PAGE : 7

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
1301	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	extramedullary hematopoiesis,<1>
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	regeneration proximal tubule,<1>,with,mineralization
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
testis	NON-REMARKABLE			
brain	NON-REMARKABLE			
1302	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 5102 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 8

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1302	SCHEDULED	3-1	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			Kidney	regeneration proximal tubule,<1>,with,mineralization
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 7143 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 9

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
1402	DEAD	1-1	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
testis	NON-REMARKABLE			
brain	NON-REMARKABLE			
			Cause of Death	no microscopical confirmation
1403	SCHEDULED	3-1	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 7143 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 10

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1403	SCHEDULED	3-1	Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	regeneration proximal tubule,<1>,with,mineralization
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
brain	NON-REMARKABLE			
1404	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 7143 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 11

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1404	SCHEDULED	3-1	stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
1406	DEAD	1-1	lung/branch	congestion,<1>//hemorrhage,<1>,focal//edema:perivascular,<1>
			bone marrow	NON-REMARKABLE
			lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	erosion:glandular stomach,<1>
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 7143 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 12

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1406	DEAD	1-1	pancreas	NON-REMARKABLE
			kidney	tubular necrosis,<1>,cortico-medullary junction,cortex//hydropic change:proximal tubule,<2>
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE
			Cause of Death	renal lesion
1407	DEAD	0-0	Lung/branch	NON-REMARKABLE
			bone marrow	NOT-EXAMINE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
kidney	NON-REMARKABLE			

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 7143 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 13

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1407	DEAD	0-0	pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE

Cause of Death no microscopical confirmation

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

(HPT050)

BAIS2

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 10000 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1502	DEAD	0-0	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	congestion,<1>
			heart	NON-REMARKABLE
			stomach	erosion:glandular stomach,<1>
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
brain	NON-REMARKABLE			
			Cause of Death	no microscopical confirmation
1506	DEAD	1-1	Lung/branch	congestion,<1>//edema:perivascular,<1>
			bone marrow	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 10000 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1506	DEAD	1-1	Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE
			Cause of Death	no microscopical confirmation
1507	DEAD	0-0	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 10000 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 16

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
1507	DEAD	0-0	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	erosion:glandular stomach,<1>
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE

Cause of Death no microscopical confirmation

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe '':Context

(HPT050)

BA1S2

APPENDIX A 6-2

HISTOLOGICAL FINDINGS (ACUTE STUDIES:INDIVIDUAL)

RAT:FEMALE

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : Control

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
2001	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
ovary	NON-REMARKABLE			
brain	NON-REMARKABLE			
2002	SCHEDULED	3-1	lung/branch	hemorrhase,<1>,focal
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : Control

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 18

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2002	SCHEDULED	3-1	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	mineralization,<1>
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 2603 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 19

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2101	SCHEDULED	3-1	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
ovary	NON-REMARKABLE			
brain	NON-REMARKABLE			
2102	SCHEDULED	3-1	Lung/branch	hemorrhage,<1>,focal
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 2603 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 20

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2102	SCHEDULED	3-1	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 3644 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2201	SCHEDULED	3-1	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	regeneration proximal tubule,<1>,with,mineralization
			pituitary	NOT-EXAMINE
			adrenal	NON-REMARKABLE
ovary	NON-REMARKABLE			
brain	NON-REMARKABLE			
2202	SCHEDULED	3-1	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 3644 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2202	SCHEDULED	3-1	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
brain	NON-REMARKABLE			

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 5102 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 23

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
2301	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NOT-EXAMINE
			adrenal	NON-REMARKABLE
ovary	NON-REMARKABLE			
brain	NON-REMARKABLE			
2302	DEAD	1-3	lung/branch	congestion,<1>
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 5102 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2302	DEAD	1-3	spleen	NON-REMARKABLE
			heart	hemorrhage,<1>
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	vacuolic change:centeral,<3>
			pancreas	NON-REMARKABLE
			kidney	tubular necrosis,<3>,cortico-medullary junction,cortex
			pituitary	NOT-EXAMINE
			adrenal	hemorrhage,<2>,cortex
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE
			eye	inflammation,<1>,cornea
	Cause of Death	renal lesion		
2303	SCHEDULED	3-1	lung/bronch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 5102 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 25

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2303	SCHEDULED	3-1	heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
brain	NON-REMARKABLE			
2306	DEAD	1-2	lung/branch	edema:perivascular,<1>
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	hemorrhage,<1>
			stomach	erosion:glandular stomach,<1>
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 5102 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2306	DEAD	1-2	liver	vacuolic change:central,<1>
			pancreas	NON-REMARKABLE
			kidney	tubular necrosis,<3>,cortico-medullary junction,cortex
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE
			Cause of Death	renal lesion
2307	DEAD	1-2	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			lymph node	NON-REMARKABLE
			thymus	hemorrhage,<1>//karyorrhexis,<4>
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	erosion:glandular stomach,<1>
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
pancreas	NON-REMARKABLE			

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 5102 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 27

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
2307	DEAD	1-2	kidney	tubular necrosis,<3>,cortico-medullary junction,cortex//hydropic change:proximal tubule,<3>
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE
			Cause of Death	renal lesion

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

(HPT050)

BAIS2

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 7143 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 28

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
2401	DEAD	1-1	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	erosion:glandular stomach,<1>
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			Kidney	tubular necrosis,<4>,cortico-medullary junction,cortex//hydropic change:proximal tubule,<3>
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE
				Cause of Death
2405	DEAD	1-1	Lung/branch	congestion,<1>//hemorrhage,<1>,focal//edema:perivascular,<1>
			bone marrow	NON-REMARKABLE

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 7143 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 29

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
2405	DEAD	1-1	Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	hydropic change:proximal tubule,<2>
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE

Cause of Death no microscopical confirmation

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 10000 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 30

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
2505	DEAD	0-0	Lung/branch	congestion,<1>//edema:perivascular,<1>
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	erosion:glandular stomach,<2>
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
brain	NON-REMARKABLE			
			Cause of Death	no microscopical confirmation
2506	DEAD	1-1	Lung/branch	congestion,<1>//edema:perivascular,<1>
			bone marrow	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
 ANIMAL : RAT F344
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 10000 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2506	DEAD	1-1	Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NOT-EXAMINE
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE
			Cause of Death	no microscopical confirmation
2510	DEAD	0-0	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0003
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 10000 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 32

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
2510	DEAD	0-0	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NOT-EXAMINE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE

Cause of Death no microscopical confirmation

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

APPENDIX A 6-3

HISTOLOGICAL FINDINGS (ACUTE STUDIES:INDIVIDUAL)

MOUSE:MALE

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : Control

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 1

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1001	SCHEDULED	3-1	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
testis	NON-REMARKABLE			
brain	NON-REMARKABLE			
1002	SCHEDULED	3-1	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROUP NAME : Control

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 2

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1002	SCHEDULED	3-1	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

(HPT050)

BAIS2

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 3151 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 3

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
1101	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
testis	NON-REMARKABLE			
brain	NON-REMARKABLE			
1107	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 3151 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 4

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1107	SCHEDULED	3-1	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 4096 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1201	SCHEDULED	3-1	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	hemorrhage,<1>
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
testis	NON-REMARKABLE			
brain	NON-REMARKABLE			
1205	SCHEDULED	3-1	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 4096 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
1205	SCHEDULED	3-1	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	atrophy, <1>
			brain	NON-REMARKABLE
			adipose	congestion, <1>

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 5325 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 7

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1303	SCHEDULED	3-1	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
testis	NON-REMARKABLE			
brain	NON-REMARKABLE			
1304	SCHEDULED	3-1	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 5325 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 8

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1304	SCHEDULED	3-1	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	ulcer:forestomach,<1>
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE
			1306	DEAD
bone marrow	NON-REMARKABLE			
lymph node	karyorrhesis,<1>			
thymus	NON-REMARKABLE			
spleen	karyorrhesis,<1>			
heart	NON-REMARKABLE			
stomach	NON-REMARKABLE			
small intes	NON-REMARKABLE			

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 5325 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1306	DEAD	1-1	large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE
			Cause of Death	no microscopical confirmation
1310	DEAD	1-2	lung/branch	congestion,<1>
			bone marrow	congestion,<1>
			lymph node	karyorrhesis,<3>
			thymus	karyorrhesis,<3>
			spleen	karyorrhesis,<2>
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 5325 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 10

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1310	DEAD	1-2	pancreas	NON-REMARKABLE
			kidney	tubular necrosis,<2>,cortico-medullary junction
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE

Cause of Death renal lesion

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

(HPT050)

BAIS2

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 6923 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1401	DEAD	1-1	lung/branch	NON-REMARKABLE
			bone marrow	congestion,<1>
			lymph node	karyorrhexis,<2>
			thymus	karyorrhexis,<2>
			spleen	karyorrhexis,<2>
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	tubular necrosis,<1>,cortico-medullary junction
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE
			Cause of Death	no microscopical confirmation
1402	DEAD	1-1	lung/branch	congestion,<1>
			bone marrow	congestion,<1>

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 6923 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 12

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1402	DEAD	1-1	Lymph node	karyorrhexis,<1>
			thymus	karyorrhexis,<2>
			spleen	karyorrhexis,<2>
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	congestion,<1>
			adrenal	congestion,<1>
			testis	NON-REMARKABLE
			brain	congestion,<1>

Cause of Death no microscopical confirmation

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : MALE

GROUP NAME : 9000 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 13

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1505	DEAD	1-1	lung/branch	congestion,<1>
			bone marrow	congestion,<1>
			lymph node	karyorrhesis,<1>
			thymus	NON-REMARKABLE
			spleen	karyorrhesis,<1>//congestion,<1>
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	congestion,<1>
			adrenal	congestion,<1>
			testis	NON-REMARKABLE
brain	congestion,<1>			
			Cause of Death	no microscopical confirmation
1508	DEAD	0-0	lung/branch	congestion,<1>
			bone marrow	congestion,<1>

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROUP NAME : 9000 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2w)

PAGE : 14

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
1508	DEAD	0-0	Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	hydronephrosis,<2>
			pituitary	congestion,<1>
			adrenal	congestion,<1>
			testis	NON-REMARKABLE
			brain	NON-REMARKABLE

Cause of Death no microscopical confirmation

():Comment

<1>:Slight

<2>:Moderate

<3>:Marked

<4>:Severe

' ':Context

(HPT050)

BA1S2

APPENDIX A 6-4

HISTOLOGICAL FINDINGS (ACUTE STUDIES:INDIVIDUAL)

MOUSE:FEMALE

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : Control

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2w)

PAGE : 15

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2001	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
ovary	NON-REMARKABLE			
brain	NON-REMARKABLE			
2002	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : Control

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 16

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
2002	SCHEDULED	3-1	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NOT-EXAMINE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

(HPT050)

BAIS2

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 3151 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
2101	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NOT-EXAMINE
			adrenal	NON-REMARKABLE
ovary	NON-REMARKABLE			
brain	NON-REMARKABLE			
2102	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			lymph node	NON-REMARKABLE
			thymus	NOT-EXAMINE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 3151 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 18

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2102	SCHEDULED	3-1	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NOT-EXAMINE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 4096 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
2201	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NOT-EXAMINE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
ovary	NON-REMARKABLE			
brain	NON-REMARKABLE			
2202	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 4096 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 20

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2202	SCHEDULED	3-1	spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context.

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 5325 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 21

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2301	SCHEDULED	3-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	deposit of melanin,<1>
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
ovary	NON-REMARKABLE			
brain	NON-REMARKABLE			
2302	DEAD	1-1	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			lymph node	karyorrhexis,<2>
			thymus	karyorrhexis,<2>

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 5325 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2302	DEAD	1-1	spleen	karyorrhexis,<2>
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	tubular necrosis,<2>,cortico-medullary junction
			pituitary	NOT-EXAMINE
			adrenal	NON-REMARKABLE
ovary	NON-REMARKABLE			
brain	NON-REMARKABLE			
			Cause of Death	renal lesion
2305	SCHEDULED	3-1	Lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			Lymph node	NON-REMARKABLE
			thymus	NON-REMARKABLE
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 5325 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 23

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2305	SCHEDULED	3-1	stomach	erosion:forestomach,<1>
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

(HPT050)

BAIS2

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 6923 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ_____	Findings_____
2405	DEAD	1-2	lung/branch	NON-REMARKABLE
			bone marrow	NOT-EXAMINE
			lymph node	karyorrhexis,<1>
			thymus	karyorrhexis,<2>
			spleen	karyorrhexis,<2>
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	tubular necrosis,<3>,cortico-medullary junction
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
brain	NON-REMARKABLE			
		Cause of Death	renal lesion	
2409	DEAD	1-1	lung/branch	NON-REMARKABLE
			bone marrow	congestion,<1>

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 6923 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

PAGE : 25

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2409	DEAD	1-1	lymph node	karyorrhexis,<3>
			thymus	karyorrhexis,<3>
			spleen	karyorrhexis,<3>
			heart	NON-REMARKABLE
			stomach	hemorrhage:glandular stomach,<1>
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	tubular necrosis,<3>,cortico-medullary junction
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE

Cause of Death renal lesion

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
 ANIMAL : MOUSE BDF1
 REPORT TYPE : A1
 SEX : FEMALE

GROUP NAME : 9000 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
 ALL ANIMALS (0- 2W)

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2506	DEAD	0-0	lung/branch	NON-REMARKABLE
			bone marrow	NON-REMARKABLE
			lymph node	NON-REMARKABLE
			thymus	karyorrhexis,<1>
			spleen	NON-REMARKABLE
			heart	NON-REMARKABLE
			stomach	hemorrhage:glandular stomach,<1>
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NOT-EXAMINE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
brain	NON-REMARKABLE			
			Cause of Death	no microscopical confirmation
2509	DEAD	1-1	lung/branch	NON-REMARKABLE
			bone marrow	congestion,<1>

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context

STUDY NO. : 0004
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROUP NAME : 9000 mg/kg

HISTOLOGICAL FINDINGS (INDIVIDUAL)
ALL ANIMALS (0- 2W)

PAGE : 27

Animal ID-NO.	Death Information	Time of Examination Week-Day	Organ	Findings
2509	DEAD	1-1	lymph node	karyorrhexis,<1>
			thymus	karyorrhexis,<1>
			spleen	karyorrhexis,<1>
			heart	NON-REMARKABLE
			stomach	NON-REMARKABLE
			small intes	NON-REMARKABLE
			large intes	NON-REMARKABLE
			Liver	NON-REMARKABLE
			pancreas	NON-REMARKABLE
			kidney	NON-REMARKABLE
			pituitary	NON-REMARKABLE
			adrenal	NON-REMARKABLE
			ovary	NON-REMARKABLE
			brain	NON-REMARKABLE

Cause of Death no microscopical confirmation

():Comment <1>:Slight <2>:Moderate <3>:Marked <4>:Severe ' ':Context