



Experimental Pathology Laboratories, Inc.

TOXSTRATEGIES, INC.
STUDY NUMBER 13026.01.01
EPL PROJECT NUMBER 928-014

HISTOPATHOLOGIC EVALUATION OF MOUSE DUODENUM SPECIMENS
FOR ABERRANT FOCI

PATHOLOGY REPORT

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FINAL REPORT



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PATHOLOGY SUMMARY

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STUDY NUMBER 13026.01.01
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HISTOPATHOLOGIC EVALUATION OF MOUSE DUODENUM SPECIMENS
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PATHOLOGY SUMMARY

INTRODUCTION

The purpose of this study was to evaluate hematoxylin and eosin-stained sections of duodenum from mice exposed to sodium dichromate dihydrate (SDD) for the presence of aberrant foci in the villi. Details of the study design and preparation of samples can be found in the study report: *“Final Report on the 90-Day Repeat Dose Toxicity Study of Sodium Dichromate Dihydrate Administered in Drinking Water to B6C3F1 Mice”*.

The experimental design is presented in Table 1.

Days of Treatment	Treatment Group	Treatment Concentration	Number of Mice	Animal Numbers
91	1	0 mg/L	10	1F1-1F10
91	2	0.3 mg/L	10	2F81-2F90
91	3	4 mg/L	10	3F161-3F170
91	4	14 mg/L	9 ^a	4F241, 4F243-4F250
91	5	60 mg/L	10	5F321-5F330
91	6	170 mg/L	10	6F401-6F410
91	7	520 mg/L	10	7F481-7F490
TOTAL			69	

^aTissue present on slide was stomach rather than duodenum for one additional animal from this group.

METHODS

Using brightfield microscopy, the pathologist evaluated all 69 hematoxylin and eosin-stained transverse sections of duodenum for the presence of crypt-like aberrant foci in villi (Schwitalla, et al., 2013).

RESULTS

No aberrant foci were observed in any of the examined duodenal sections.



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Senior Veterinary Pathologist4-22-14

Date

JCW/skh

REFERENCES

Final Report on the 90-Day Repeat Dose Toxicity Study of Sodium Dichromate Dihydrate Administered in Drinking Water to B6C3F1 Mice. (2011). Southern Research Study Number 13026.01.01.

Schwitalla S, Fingerle AA, Cammareri P, Nebelsiek T, Göktuna SI, Ziegler PK, Canli O, Heijmans J, Huels DJ, Moreaux G, Rupec RA, Gerhard M, Schmid R, Barker N, Clevers H, Lang R, Neumann J, Kirchner T, Taketo MM, van den Brink GR, Sansom OJ, Arkan MC, Greten FR. (2013). Intestinal tumorigenesis initiated by dedifferentiation and acquisition of stem-cell-like properties. *Cell*. **152(1-2)**:25-38.

SUMMARY INCIDENCE TABLES

SUMMARY INCIDENCE TABLE

13026.01.01
Terminal Sacrifice
Female Mouse

[illegible]

SUMMARY INCIDENCE TABLE

13026.01.01
Terminal Sacrifice
Female Mouse

[illegible]

HISTOPATHOLOGY INCIDENCE TABLES

HISTOPATHOLOGY INCIDENCE TABLE

13026.01.01
Terminal Sacrifice
Female Mouse

ANIMAL

GROUP
1

[illegible]

EPL

Experimental Pathology Laboratories, Inc.

II-1

Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
1=minimal 2=slight/mild 3=moderate 4=moderately severe 5=severe/high
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

HISTOPATHOLOGY INCIDENCE TABLE

GROUP
2

13026.01.01
Terminal Sacrifice
Female Mouse

ANIMAL

[illegible]

HISTOPATHOLOGY INCIDENCE TABLE

13026.01.01
Terminal Sacrifice
Female Mouse

ANIMAL

GROUP
3

GROUP
4

[illegible]

HISTOPATHOLOGY INCIDENCE TABLE

GROUP
5

13026.01.01
Terminal Sacrifice
Female Mouse

ANIMAL

[illegible]

HISTOPATHOLOGY INCIDENCE TABLE

GROUP
6

13026.01.01
Terminal Sacrifice
Female Mouse

ANIMAL

[illegible]

HISTOPATHOLOGY INCIDENCE TABLE

GROUP
7

13026.01.01
Terminal Sacrifice
Female Mouse

ANIMAL

[illegible]