

**Experiment Number:** 05117-04  
**Test Type:** INIT/PROMOT  
**Route:** SKIN APPLICATION  
**Species/Strain:** Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
**Test Compound:** Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
**CAS Number:** INIT/PROM

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 06:30:15  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>C Number:</b>	C61994A
<b>Lock Date:</b>	04/07/1992
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Both
<b>PWG Approval Date</b>	04/27/1994

Experiment Number: 05117-04

Test Type: INIT/PROMOT

Route: SKIN APPLICATION

Species/Strain: Mouse/B6C3F1

E05: CLINICAL OBSERVATIONS SUMMARY

Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)

CAS Number: INIT/PROM

Date Report Requested: 10/21/2014

Time Report Requested: 06:30:15

First Dose M/F: NA / NA

Lab: BAT

SEX :MALE WEEK: 53

OBSERVATIONS	VEHICLE CONTROL		MNNG 100/ACETONE		MNNG 500/ACETONE		MNNG1000/ACETONE	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
(Skin Paint Only) Abscess	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 94
(Skin Paint Only) Clipper Injury	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
(Skin Paint Only) Crusty	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 16	0 / 0	16 / 30 DAY 16
(Skin Paint Only) Discoloration	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	14 / 30 DAY 9	0 / 0	26 / 30 DAY 9
(Skin Paint Only) Scaly	0 / 0	0 / 30	0 / 0	1 / 30 DAY 9	0 / 0	30 / 30 DAY 9	0 / 0	30 / 30 DAY 9
Abnormal Posture	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Body Ventral	0 / 0	0 / 30	0 / 0	1 / 30 DAY 226	0 / 0	0 / 30	0 / 0	2 / 30 DAY 205
Alopecia Hip	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:16  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :MALE WEEK: 53

OBSERVATIONS	VEHICLE CONTROL		MNNG 100/ACETONE		MNNG 500/ACETONE		MNNG1000/ACETONE	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Alopecia Right Rear Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Carcinoma	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Discharge Penis	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 45	0 / 0	0 / 30
Discharge	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Irritation	0 / 0	0 / 30	0 / 0	1 / 30 DAY 282	0 / 0	3 / 30 DAY 16	0 / 0	17 / 30 DAY 16
Missing Anatomy Tail	0 / 0	0 / 30	0 / 0	1 / 30 DAY 359	0 / 0	0 / 30	0 / 0	0 / 30
Override	0 / 0	0 / 30	0 / 0	1 / 30 DAY 23	0 / 0	0 / 30	0 / 0	1 / 30 DAY 37
Pallor Entire Animal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:16  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :MALE WEEK: 53

OBSERVATIONS	VEHICLE CONTROL		MNNG 100/ACETONE		MNNG 500/ACETONE		MNNG1000/ACETONE	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Papilloma	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 233	0 / 0	13 / 30 DAY 45
Ruffled Fur	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Sore Body Dorsal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 108
Swelling Body Dorsal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 233
Swelling Body Ventral	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Swelling Groin	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Swelling Left Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Swelling Neck	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

**Experiment Number:** 05117-04  
**Test Type:** INIT/PROMOT  
**Route:** SKIN APPLICATION  
**Species/Strain:** Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
**Test Compound:** Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
**CAS Number:** INIT/PROM

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 06:30:17  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**SEX :MALE**                      **WEEK: 53**

OBSERVATIONS	VEHICLE CONTROL		MNNG 100/ACETONE		MNNG 500/ACETONE		MNNG1000/ACETONE	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Swelling	0 / 0	0 / 30	0 / 0	1 / 30 DAY 310	0 / 0	0 / 30	0 / 0	2 / 30 DAY 317
Thickened	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	3 / 30 DAY 16	0 / 0	3 / 30 DAY 16
Tissue Mass Body Dorsal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	2 / 30 DAY 52	0 / 0	15 / 30 DAY 30
Ulcer	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 23
Ulcer Right Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)  
 + ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY  
 ROW 2 = DAY OF ONSET

Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:17  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :MALE WEEK: 53

OBSERVATIONS	TPA 5 COMPLETE		MNNG100/COMPLETE		BPO 20 COMPLETE		MNNG 100/BPO 20	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
(Skin Paint Only) Abscess	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
(Skin Paint Only) Clipper Injury	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
(Skin Paint Only) Crusty	0 / 0	0 / 30	0 / 0	1 / 30 DAY 356	0 / 0	0 / 30	0 / 0	0 / 30
(Skin Paint Only) Discoloration	0 / 0	12 / 30 DAY 9	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
(Skin Paint Only) Scaly	0 / 0	30 / 30 DAY 9	0 / 0	26 / 30 DAY 16	0 / 0	10 / 30 DAY 37	0 / 0	7 / 30 DAY 16
Abnormal Posture	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Body Ventral	0 / 0	1 / 30 DAY 115	0 / 0	1 / 30 DAY 255	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Hip	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:18  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :MALE WEEK: 53

OBSERVATIONS	TPA 5 COMPLETE		MNNG100/COMPLETE		BPO 20 COMPLETE		MNNG 100/BPO 20	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Alopecia Right Rear Leg	0 / 0	1 / 30 DAY 143	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Carcinoma	0 / 0	0 / 30	0 / 0	1 / 30 DAY 296	0 / 0	0 / 30	0 / 0	0 / 30
Discharge Penis	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 59	0 / 0	0 / 30
Discharge	0 / 0	0 / 30	0 / 0	2 / 30 DAY 233	0 / 0	0 / 30	0 / 0	0 / 30
Irritation	0 / 0	10 / 30 DAY 212	0 / 0	28 / 30 DAY 30	0 / 0	1 / 30 DAY 170	0 / 0	6 / 30 DAY 170
Missing Anatomy Tail	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	2 / 30 DAY 255
Override	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Pallor Entire Animal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:18  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :MALE WEEK: 53

OBSERVATIONS	TPA 5 COMPLETE		MNNG100/COMPLETE		BPO 20 COMPLETE		MNNG 100/BPO 20	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Papilloma	0 / 0	0 / 30	0 / 0	26 / 30 DAY 164	0 / 0	0 / 30	0 / 0	0 / 30
Ruffled Fur	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 282
Sore Body Dorsal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Swelling Body Dorsal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Swelling Body Ventral	0 / 0	1 / 30 DAY 268	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Swelling Groin	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 352	0 / 0	0 / 30
Swelling Left Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Swelling Neck	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET



Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:19  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :MALE WEEK: 53

OBSERVATIONS	TPA 5 COMPLETE		MNNG100/COMPLETE		BPO 20 COMPLETE		MNNG 100/BPO 20	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Swelling	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Thickened	0 / 0	1 / 30 DAY 16	0 / 0	1 / 30 DAY 23	0 / 0	0 / 30	0 / 0	0 / 30
Tissue Mass Body Dorsal	0 / 0	1 / 30 DAY 359	0 / 0	29 / 30 DAY 150	0 / 0	0 / 30	0 / 0	0 / 30
Ulcer	0 / 0	0 / 30	0 / 0	1 / 30 DAY 289	0 / 0	0 / 30	0 / 0	2 / 30 DAY 240
Ulcer Right Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 282

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04

**E05: CLINICAL OBSERVATIONS SUMMARY**

Date Report Requested: 10/21/2014

Test Type: INIT/PROMOT

Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)

Time Report Requested: 06:30:19

Route: SKIN APPLICATION

CAS Number: INIT/PROM

First Dose M/F: NA / NA

Species/Strain: Mouse/B6C3F1

Lab: BAT

SEX :MALE                      WEEK: 53

OBSERVATIONS	MNNG 500/BPO 20		MNNG1000/BPO 20		MNNG 100/TPA 5		MNNG1000/TPA 5	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
(Skin Paint Only) Abscess	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 94
(Skin Paint Only) Clipper Injury	0 / 0	0 / 30	0 / 0	1 / 30 DAY 255	0 / 0	0 / 30	0 / 0	0 / 30
(Skin Paint Only) Crusty	0 / 0	0 / 30	0 / 0	15 / 30 DAY 16	0 / 0	4 / 30 DAY 16	0 / 0	20 / 30 DAY 16
(Skin Paint Only) Discoloration	0 / 0	15 / 30 DAY 9	0 / 0	23 / 30 DAY 9	0 / 0	12 / 30 DAY 9	0 / 0	26 / 30 DAY 9
(Skin Paint Only) Scaly	0 / 0	30 / 30 DAY 9	0 / 0	30 / 30 DAY 9	0 / 0	30 / 30 DAY 9	0 / 0	30 / 30 DAY 9
Abnormal Posture	0 / 0	0 / 30	0 / 0	1 / 30 DAY 289	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Body Ventral	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 226	0 / 0	1 / 30 DAY 296
Alopecia Hip	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 289	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:19  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :MALE WEEK: 53

OBSERVATIONS	MNNG 500/BPO 20		MNNG1000/BPO 20		MNNG 100/TPA 5		MNNG1000/TPA 5	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Alopecia Right Rear Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Carcinoma	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Discharge Penis	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Discharge	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	6 / 30 DAY 226
Irritation	0 / 0	17 / 30 DAY 16	0 / 0	25 / 30 DAY 16	0 / 0	21 / 30 DAY 16	0 / 0	26 / 30 DAY 16
Missing Anatomy Tail	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 359	0 / 0	0 / 30
Override	0 / 0	1 / 30 DAY 37	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Pallor Entire Animal	0 / 0	1 / 30 DAY 338	0 / 0	1 / 30 DAY 289	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:20  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :MALE WEEK: 53

OBSERVATIONS	MNNG 500/BPO 20		MNNG1000/BPO 20		MNNG 100/TPA 5		MNNG1000/TPA 5	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Papilloma	0 / 0	3 / 30 DAY 303	0 / 0	9 / 30 DAY 52	0 / 0	9 / 30 DAY 157	0 / 0	26 / 30 DAY 52
Ruffled Fur	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Sore Body Dorsal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Swelling Body Dorsal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 108
Swelling Body Ventral	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Swelling Groin	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Swelling Left Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 261
Swelling Neck	0 / 0	0 / 30	0 / 0	1 / 30 DAY 247	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

**Experiment Number:** 05117-04  
**Test Type:** INIT/PROMOT  
**Route:** SKIN APPLICATION  
**Species/Strain:** Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
**Test Compound:** Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
**CAS Number:** INIT/PROM

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 06:30:20  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**SEX :MALE                      WEEK: 53**

OBSERVATIONS	MNNG 500/BPO 20		MNNG1000/BPO 20		MNNG 100/TPA 5		MNNG1000/TPA 5	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Swelling	0 / 0	1 / 30 DAY 275	0 / 0	0 / 30	0 / 0	1 / 30 DAY 255	0 / 0	3 / 30 DAY 275
Thickened	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	5 / 30 DAY 16	0 / 0	2 / 30 DAY 23
Tissue Mass Body Dorsal	0 / 0	4 / 30 DAY 289	0 / 0	10 / 30 DAY 37	0 / 0	9 / 30 DAY 143	0 / 0	26 / 30 DAY 37
Ulcer	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	2 / 30 DAY 240
Ulcer Right Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

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

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)  
 + ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY  
 ROW 2 = DAY OF ONSET

Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:20  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :FEMALE WEEK: 53

OBSERVATIONS	VEHICLE CONTROL		MNNG 100/ACETONE		MNNG 500/ACETONE		MNNG1000/ACETONE	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
(Skin Paint Only) Clipper Injury	0 / 0	0 / 30	0 / 0	1 / 30 DAY 42	0 / 0	0 / 30	0 / 0	0 / 30
(Skin Paint Only) Crusty	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	4 / 30 DAY 20
(Skin Paint Only) Discoloration	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	9 / 30 DAY 13	0 / 0	5 / 30 DAY 6
(Skin Paint Only) Erosion	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
(Skin Paint Only) Scaly	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	30 / 30 DAY 6	0 / 0	30 / 30 DAY 6
Abnormal Posture	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Anal Area	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Body Ventral	0 / 0	2 / 30 DAY 168	0 / 0	0 / 30	0 / 0	1 / 30 DAY 56	0 / 0	4 / 30 DAY 49

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:22  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :FEMALE WEEK: 53

OBSERVATIONS	VEHICLE CONTROL		MNNG 100/ACETONE		MNNG 500/ACETONE		MNNG1000/ACETONE	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Alopecia Entire Animal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 294
Alopecia Face	0 / 0	1 / 30 DAY 266	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Left Front Foot	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Left Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Left Rear Foot	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 70
Alopecia Left Rear Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 56
Alopecia Right Front Foot	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Right Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 051117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:23  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :FEMALE WEEK: 53

OBSERVATIONS	VEHICLE CONTROL		MNNG 100/ACETONE		MNNG 500/ACETONE		MNNG1000/ACETONE	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Alopecia Right Rear Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Carcinoma	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 126
Discharge	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 98
Discoloration Hair	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Emaciated	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Fractured Appendage Tail	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Irritation	0 / 0	1 / 30 DAY 6	0 / 0	3 / 30 DAY 6	0 / 0	22 / 30 DAY 6	0 / 0	28 / 30 DAY 6
Missing Anatomy Tail	0 / 0	1 / 30 DAY 168	0 / 0	0 / 30	0 / 0	1 / 30 DAY 315	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET



Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:24  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :FEMALE WEEK: 53

OBSERVATIONS	VEHICLE CONTROL		MNNG 100/ACETONE		MNNG 500/ACETONE		MNNG1000/ACETONE	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Override	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Pallor Entire Animal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 294
Papilloma	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	13 / 30 DAY 49
Ruffled Fur	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 322
Sore	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 119
Swelling Body Dorsal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Swelling	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Thickened	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:24  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :FEMALE WEEK: 53

OBSERVATIONS	VEHICLE CONTROL		MNNG 100/ACETONE		MNNG 500/ACETONE		MNNG1000/ACETONE	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Tissue Mass Body Dorsal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	14 / 30 DAY 34
Ulcer	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	3 / 30 DAY 20
Ulcer Body Ventral	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Ulcer Left Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Ulcer Neck	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Ulcer Right Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 231
Ulcer Shoulder	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Wound Neck	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04

Test Type: INIT/PROMOT

Route: SKIN APPLICATION

Species/Strain: Mouse/B6C3F1

E05: CLINICAL OBSERVATIONS SUMMARY

Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)

CAS Number: INIT/PROM

Date Report Requested: 10/21/2014

Time Report Requested: 06:30:24

First Dose M/F: NA / NA

Lab: BAT

SEX :FEMALE WEEK: 53

OBSERVATIONS	TPA 5 COMPLETE		MNNG100/COMPLETE		BPO 20 COMPLETE		MNNG 100/BPO 20	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
(Skin Paint Only) Clipper Injury	0 / 0	1 / 30 DAY 294	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
(Skin Paint Only) Crusty	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 329	0 / 0	0 / 30
(Skin Paint Only) Discoloration	0 / 0	26 / 30 DAY 13	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
(Skin Paint Only) Erosion	0 / 0	0 / 30	0 / 0	1 / 30 DAY 301	0 / 0	0 / 30	0 / 0	0 / 30
(Skin Paint Only) Scaly	0 / 0	30 / 30 DAY 6	0 / 0	27 / 30 DAY 13	0 / 0	5 / 30 DAY 6	0 / 0	1 / 30 DAY 287
Abnormal Posture	0 / 0	0 / 30	0 / 0	1 / 30 DAY 308	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Anal Area	0 / 0	1 / 30 DAY 356	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Body Ventral	0 / 0	4 / 30 DAY 49	0 / 0	4 / 30 DAY 42	0 / 0	2 / 30 DAY 168	0 / 0	3 / 30 DAY 56

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

**Experiment Number:** 05117-04  
**Test Type:** INIT/PROMOT  
**Route:** SKIN APPLICATION  
**Species/Strain:** Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
**Test Compound:** Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
**CAS Number:** INIT/PROM

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 06:30:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**SEX :FEMALE**                      **WEEK: 53**

OBSERVATIONS	TPA 5 COMPLETE		MNNG100/COMPLETE		BPO 20 COMPLETE		MNNG 100/BPO 20	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Alopecia Entire Animal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Face	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Left Front Foot	0 / 0	1 / 30 DAY 56	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Left Front Leg	0 / 0	1 / 30 DAY 49	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Left Rear Foot	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Left Rear Leg	0 / 0	2 / 30 DAY 98	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Right Front Foot	0 / 0	1 / 30 DAY 56	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Right Front Leg	0 / 0	1 / 30 DAY 49	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

**Experiment Number:** 051117-04  
**Test Type:** INIT/PROMOT  
**Route:** SKIN APPLICATION  
**Species/Strain:** Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
**Test Compound:** Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
**CAS Number:** INIT/PROM

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 06:30:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**SEX :FEMALE**                      **WEEK: 53**

OBSERVATIONS	TPA 5 COMPLETE		MNNG100/COMPLETE		BPO 20 COMPLETE		MNNG 100/BPO 20	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Alopecia Right Rear Leg	0 / 0	2 / 30 DAY 77	0 / 0	1 / 30 DAY 84	0 / 0	0 / 30	0 / 0	0 / 30
Carcinoma	0 / 0	0 / 30	0 / 0	1 / 30 DAY 329	0 / 0	0 / 30	0 / 0	0 / 30
Discharge	0 / 0	0 / 30	0 / 0	4 / 30 DAY 266	0 / 0	0 / 30	0 / 0	0 / 30
Discoloration Hair	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Emaciated	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 259
Fractured Appendage Tail	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Irritation	0 / 0	30 / 30 DAY 6	0 / 0	27 / 30 DAY 6	0 / 0	4 / 30 DAY 6	0 / 0	4 / 30 DAY 6
Missing Anatomy Tail	0 / 0	1 / 30 DAY 168	0 / 0	0 / 30	0 / 0	1 / 30 DAY 259	0 / 0	1 / 30 DAY 168

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:26  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :FEMALE WEEK: 53

OBSERVATIONS	TPA 5 COMPLETE		MNNG100/COMPLETE		BPO 20 COMPLETE		MNNG 100/BPO 20	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Override	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Pallor Entire Animal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Papilloma	0 / 0	0 / 30	0 / 0	29 / 30 DAY 126	0 / 0	0 / 30	0 / 0	1 / 30 DAY 308
Ruffled Fur	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 252	0 / 0	0 / 30
Sore	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Swelling Body Dorsal	0 / 0	0 / 30	0 / 0	1 / 30 DAY 238	0 / 0	0 / 30	0 / 0	0 / 30
Swelling	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Thickened	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:27  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :FEMALE WEEK: 53

OBSERVATIONS	TPA 5 COMPLETE		MNNG100/COMPLETE		BPO 20 COMPLETE		MNNG 100/BPO 20	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Tissue Mass Body Dorsal	0 / 0	0 / 30	0 / 0	30 / 30 DAY 77	0 / 0	1 / 30 DAY 329	0 / 0	1 / 30 DAY 294
Ulcer	0 / 0	0 / 30	0 / 0	3 / 30 DAY 294	0 / 0	2 / 30 DAY 238	0 / 0	0 / 30
Ulcer Body Ventral	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 294	0 / 0	0 / 30
Ulcer Left Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 259	0 / 0	0 / 30
Ulcer Neck	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Ulcer Right Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	2 / 30 DAY 287	0 / 0	0 / 30
Ulcer Shoulder	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Wound Neck	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:27  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :FEMALE WEEK: 53

OBSERVATIONS	MNNG 500/BPO 20		MNNG1000/BPO 20		MNNG 100/TPA 5		MNNG1000/TPA 5	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
(Skin Paint Only) Clipper Injury	0 / 0	0 / 30	0 / 0	1 / 30 DAY 98	0 / 0	0 / 30	0 / 0	0 / 30
(Skin Paint Only) Crusty	0 / 0	0 / 30	0 / 0	4 / 30 DAY 20	0 / 0	0 / 30	0 / 0	4 / 30 DAY 20
(Skin Paint Only) Discoloration	0 / 0	13 / 30 DAY 13	0 / 0	21 / 30 DAY 6	0 / 0	22 / 30 DAY 20	0 / 0	20 / 30 DAY 6
(Skin Paint Only) Erosion	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
(Skin Paint Only) Scaly	0 / 0	30 / 30 DAY 6	0 / 0	30 / 30 DAY 6	0 / 0	30 / 30 DAY 13	0 / 0	30 / 30 DAY 6
Abnormal Posture	0 / 0	1 / 30 DAY 343	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Anal Area	0 / 0	0 / 30	0 / 0	1 / 30 DAY 356	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Body Ventral	0 / 0	1 / 30 DAY 360	0 / 0	4 / 30 DAY 49	0 / 0	3 / 30 DAY 56	0 / 0	5 / 30 DAY 49

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET



**Experiment Number:** 05117-04  
**Test Type:** INIT/PROMOT  
**Route:** SKIN APPLICATION  
**Species/Strain:** Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
**Test Compound:** Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
**CAS Number:** INIT/PROM

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 06:30:28  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**SEX :FEMALE**                      **WEEK: 53**

OBSERVATIONS	MNNG 500/BPO 20		MNNG1000/BPO 20		MNNG 100/TPA 5		MNNG1000/TPA 5	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Alopecia Entire Animal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Face	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Left Front Foot	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Left Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 154
Alopecia Left Rear Foot	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Left Rear Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 154
Alopecia Right Front Foot	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Alopecia Right Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04

Test Type: INIT/PROMOT

Route: SKIN APPLICATION

Species/Strain: Mouse/B6C3F1

E05: CLINICAL OBSERVATIONS SUMMARY

Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)

CAS Number: INIT/PROM

Date Report Requested: 10/21/2014

Time Report Requested: 06:30:28

First Dose M/F: NA / NA

Lab: BAT

SEX :FEMALE WEEK: 53

OBSERVATIONS	MNNG 500/BPO 20		MNNG1000/BPO 20		MNNG 100/TPA 5		MNNG1000/TPA 5	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Alopecia Right Rear Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 154
Carcinoma	0 / 0	0 / 30	0 / 0	1 / 30 DAY 126	0 / 0	0 / 30	0 / 0	0 / 30
Discharge	0 / 0	0 / 30	0 / 0	1 / 30 DAY 231	0 / 0	0 / 30	0 / 0	0 / 30
Discoloration Hair	0 / 0	0 / 30	0 / 0	2 / 30 DAY 294	0 / 0	0 / 30	0 / 0	0 / 30
Emaciated	0 / 0	1 / 30 DAY 322	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Fractured Appendage Tail	0 / 0	1 / 30 DAY 259	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Irritation	0 / 0	23 / 30 DAY 6	0 / 0	30 / 30 DAY 6	0 / 0	14 / 30 DAY 13	0 / 0	30 / 30 DAY 6
Missing Anatomy Tail	0 / 0	1 / 30 DAY 266	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04  
 Test Type: INIT/PROMOT  
 Route: SKIN APPLICATION  
 Species/Strain: Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
 CAS Number: INIT/PROM

Date Report Requested: 10/21/2014  
 Time Report Requested: 06:30:29  
 First Dose M/F: NA / NA  
 Lab: BAT

SEX :FEMALE WEEK: 53

OBSERVATIONS	MNNG 500/BPO 20		MNNG1000/BPO 20		MNNG 100/TPA 5		MNNG1000/TPA 5	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Override	0 / 0	1 / 30 DAY 356	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Pallor Entire Animal	0 / 0	0 / 30	0 / 0	1 / 30 DAY 343	0 / 0	0 / 30	0 / 0	0 / 30
Papilloma	0 / 0	3 / 30 DAY 238	0 / 0	13 / 30 DAY 49	0 / 0	1 / 30 DAY 301	0 / 0	16 / 30 DAY 56
Ruffled Fur	0 / 0	0 / 30	0 / 0	1 / 30 DAY 212	0 / 0	0 / 30	0 / 0	1 / 30 DAY 273
Sore	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Swelling Body Dorsal	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 161
Swelling	0 / 0	0 / 30	0 / 0	2 / 30 DAY 252	0 / 0	0 / 30	0 / 0	4 / 30 DAY 252
Thickened	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	1 / 30 DAY 294

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

Experiment Number: 05117-04

Test Type: INIT/PROMOT

Route: SKIN APPLICATION

Species/Strain: Mouse/B6C3F1

E05: CLINICAL OBSERVATIONS SUMMARY

Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)

CAS Number: INIT/PROM

Date Report Requested: 10/21/2014

Time Report Requested: 06:30:30

First Dose M/F: NA / NA

Lab: BAT

SEX :FEMALE

WEEK: 53

OBSERVATIONS	MNNG 500/BPO 20		MNNG1000/BPO 20		MNNG 100/TPA 5		MNNG1000/TPA 5	
	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+	CURRENT*	TOTAL+
Tissue Mass Body Dorsal	0 / 0	3 / 30 DAY 224	0 / 0	13 / 30 DAY 34	0 / 0	1 / 30 DAY 287	0 / 0	17 / 30 DAY 34
Ulcer	0 / 0	0 / 30	0 / 0	1 / 30 DAY 20	0 / 0	0 / 30	0 / 0	4 / 30 DAY 20
Ulcer Body Ventral	0 / 0	0 / 30	0 / 0	1 / 30 DAY 245	0 / 0	0 / 30	0 / 0	1 / 30 DAY 252
Ulcer Left Front Leg	0 / 0	0 / 30	0 / 0	1 / 30 DAY 224	0 / 0	0 / 30	0 / 0	1 / 30 DAY 231
Ulcer Neck	0 / 0	1 / 30 DAY 294	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Ulcer Right Front Leg	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Ulcer Shoulder	0 / 0	1 / 30 DAY 294	0 / 0	0 / 30	0 / 0	0 / 30	0 / 0	0 / 30
Wound Neck	0 / 0	0 / 30	0 / 0	1 / 30 DAY 196	0 / 0	0 / 30	0 / 0	0 / 30

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)

+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY

ROW 2 = DAY OF ONSET

**Experiment Number:** 05117-04  
**Test Type:** INIT/PROMOT  
**Route:** SKIN APPLICATION  
**Species/Strain:** Mouse/B6C3F1

**E05: CLINICAL OBSERVATIONS SUMMARY**  
**Test Compound:** Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)  
**CAS Number:** INIT/PROM

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 06:30:30  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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

\* ANIMALS WITH OBSERVATION IN CURRENT PERIOD / TOTAL ANIMALS OBSERVED IN CURRENT PERIOD (WITHIN 7 DAYS OF RUN DATE)  
+ ROW 1 = CUMULATIVE NO. OF ANIMALS WITH OBSERVATION / TOTAL ANIMALS STARTED ON STUDY  
ROW 2 = DAY OF ONSET