

# Supplemental Figure 1 – Experimental Timeline

## Acclimation Phase 1

1

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- Weight
- Temperature (IR + Rectal)

## Acclimation Phase 2

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- Weight
- Temperature (IR + Rectal)
- Vehicle Injection (IP)
- 60m Rest
- **Temperature (IR + Rectal)**

## Testing Battery

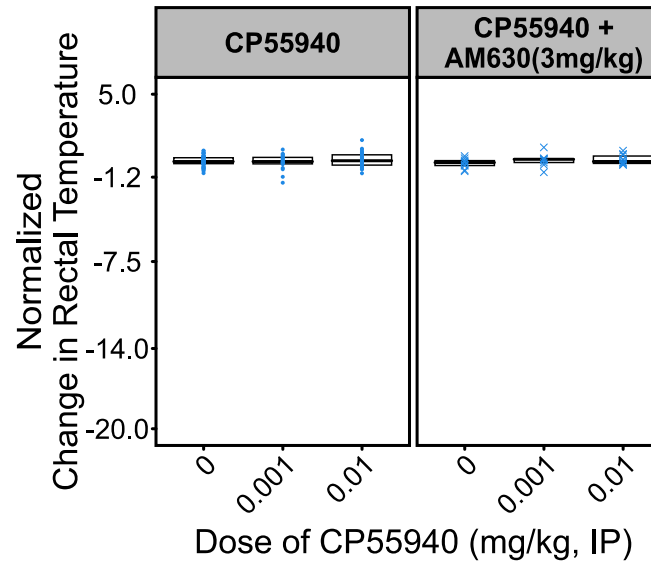
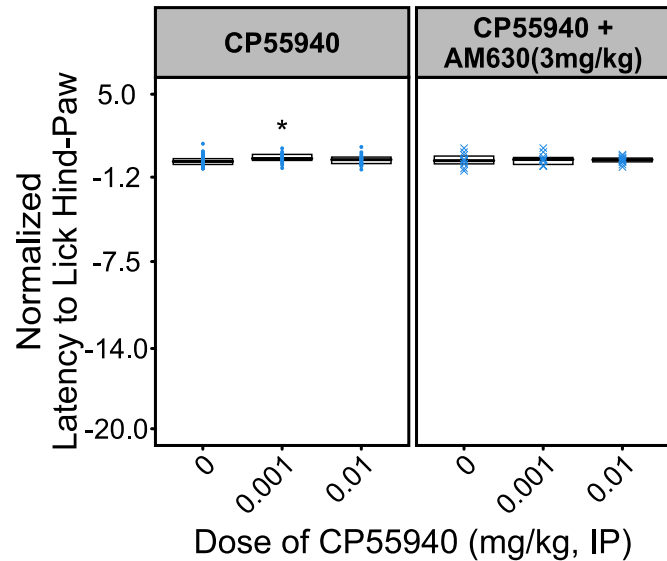
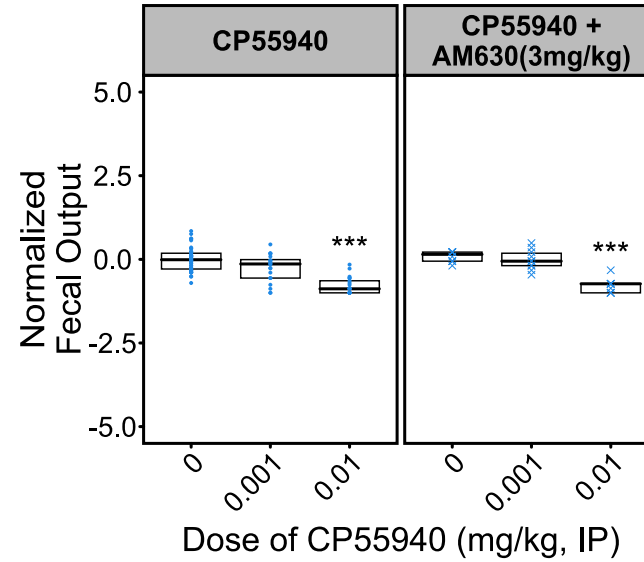
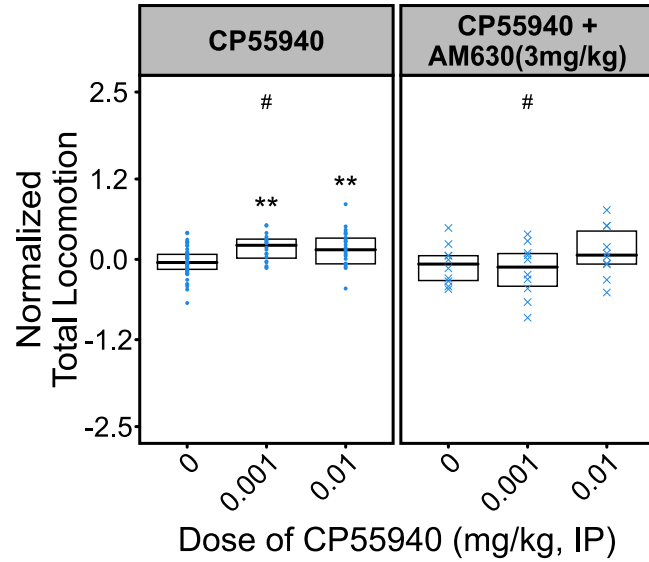
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- Weight
- Temperature (IR + Rectal)
- Vehicle Injection (IP)
- 30m Rest
- **Open Field (30-60m)**
- **60m Temperature (IR + Rectal)**
- **Hot Plate**

# Supplemental Figure 2 - Baseline Measures During Vehicle Acclimation

Measure	Baseline Weight				Baseline Rectal Temperature				Change in Rectal Temperature				Baseline Skin/Pelage (IR) Temperature				Change in Skin/Pelage (IR) Temperature			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
Age	Young	Old	Young	Old	Young	Old	Young	Old	Young	Old	Young	Old	Young	Old	Young	Old	Young	Old	Young	Old
Mean	27.77	32.81	22.62	27.81	37.24	36.86	37.49	36.88	-0.17	-0.28	-0.18	-0.11	30.43	29.94	30.75	29.54	-0.30	-0.12	-0.34	-0.03
S.E.M.	0.06	0.12	0.10	0.21	0.02	0.03	0.04	0.04	0.02	0.04	0.04	0.06	0.03	0.06	0.06	0.06	0.03	0.04	0.06	0.07
n=	655	510	144	144	655	510	144	144	655	510	144	144	655	510	144	144	654	510	144	144

# Supplemental Figure 3 – Effects of CP55940 and AM630 coadministration in Young Males





# Supplemental Figure 5 - Sample Sizes

## Sample Sizes in Figure 1

Dose	Sex	Distance_30m_Total		Fecal_Output		Pain_Latency_Hot_Plate		Pain_Latency_Tail_Water		Temp_Rectal_Change		Temp_IR_Change	
		Young	Old	Young	Old	Young	Old	Young	Old	Young	Old	Young	Old
<b>0</b>	<b>All</b>	73	56	68	52	73	56	28	40	73	56	71	56
<b>0.001</b>	<b>All</b>	32	23	32	23	32	23	12	12	32	23	32	22
<b>0.01</b>	<b>All</b>	38	29	33	24	38	29	12	11	38	28	35	29
<b>0.1</b>	<b>All</b>	23	15	15	9	23	15	8	10	23	13	20	15
<b>0.4</b>	<b>All</b>	13	13	8	7	13	14	8	9	13	14	11	14
<b>0.8</b>	<b>All</b>	22	26	17	21	23	26	19	22	23	25	21	26

## Sample Sizes in Figure 2

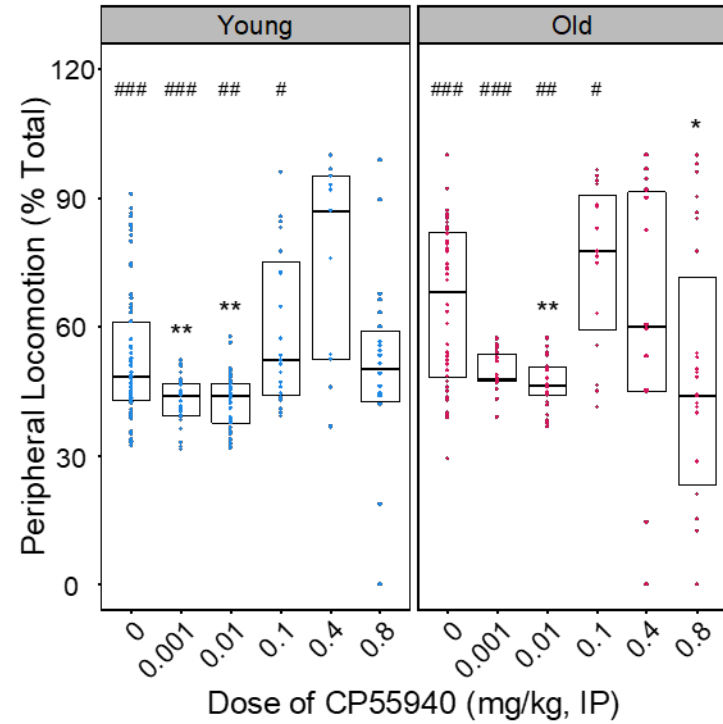
## Sample Sizes in Figure 3

Measure		Distance_30m_Total				Fecal_Output				Pain_Latency_Hot_Plate				Temp_Rectal_Change			
Dose Group		CP55940 Alone	CP55940+ AM251	CP55940 Alone	CP55940+ AM251	CP55940 Alone	CP55940+ AM251	CP55940 Alone	CP55940+ AM251	CP55940 Alone	CP55940+ AM251	CP55940 Alone	CP55940+ AM251	CP55940 Alone	CP55940+ AM251	CP55940 Alone	CP55940+ AM251
Sex	Dose	Young	Young	Old	Old	Young	Young	Old	Old	Young	Young	Old	Old	Young	Young	Old	Old
<b>Male</b>	<b>0</b>	51	17	35	20	48	17	31	20	53	14	35	20	53	17	35	18
<b>Male</b>	<b>0.001</b>	20	10	11	10	20	10	11	10	20	10	11	10	20	10	11	10
<b>Male</b>	<b>0.01</b>	26	10	17	10	21	10	12	10	26	10	17	10	26	10	17	9
<b>Male</b>	<b>0.8</b>	10	8	12	10	7	8	10	10	11	8	14	10	11	8	14	10

# Supplemental Figure 6

## Effects of CP55940 on Peripheral Locomotion in the Open Field

### Young and Aged Male and Female



### Young Males

