

SUPPLEMENTAL MATERIAL

for

IcyHot analgesic cream triggers remote cardioprotection in rodents

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Supplemental Tables:

Supplemental Table 1. Hemodynamics for analgesic cream infarct size studies.

Hemodynamic results for *in vivo* experimental groups measured at baseline, at 15 minutes of ischemia, and at 2 hours of reperfusion. No significant changes were noted between groups for each phase relative to control. Statistical differences were noted when comparing within groups reperfusion values to baseline values (⁺P<0.01, relative to baseline value, *P<0.01, relative to control for that time point). Abbreviations for the table are as follows: HR = heart rate (beats/min), MAP = mean arterial pressure (mmHg), RPP = rate pressure product (mmHg/1000).

Supplemental Table 2. Hemodynamics for TRPA1 inhibitor infarct size studies.

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Supplemental Table 3. Hemodynamics for timing of IcyHot infarct size studies.

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Supplemental Figures:

Supplemental Figure 1. Area at risk per left ventricle for analgesic cream infarct size studies. Area at risk per left ventricle percentage (AAR/LV%) for each experimental group. No significant differences were seen between groups.

Supplemental Figure 2. Dose-response for methyl salicylate in isolated cardiac myocytes subjected to hypoxia-reoxygenation. Percentage of trypan blue positive cells after isolated adult cardiac myocytes are subjected to 2 hours hypoxia followed by 4 hours reoxygenation. Methyl salicylate dose-dependently reduced the number of trypan blue positive cells after reoxygenation. *P<0.01 versus DMSO treated control.

Supplemental Figure 3. Area at risk per left ventricle for TRPA1 inhibitor infarct size studies. Area at risk per left ventricle percentage (AAR/LV%) for each experimental group. No significant differences were seen between groups.

Supplemental Figure 4. Area at risk per left ventricle for timing of IcyHot infarct size studies. Area at risk per left ventricle percentage (AAR/LV%) for each experimental group. No significant differences were seen between groups.

Supplemental Table 1.

	n	Baseline			15min Ischemia			2hr Reperfusion		
		HR	MAP	RPP	HR	MAP	RPP	HR	MAP	RPP
Control	6	414±8	103±10	48±5	408±8	101±7	46±4	374±10	79±4	37±2
IcyHot	6	440±17	112±8	57±5	437±14	92±11	47±4	412±18	79±6 ⁺	40±3 ⁺
Preparation H	6	418±11	119±6	59±3	441±12	108±8	58±4	425±12	91±3 ⁺	52±3 [*]
Aspercreme	6	422±18	121±8	60±4	421±21	107±10	54±5	386±8	87±3 ⁺	44±2 ⁺
Tiger Balm	6	387±9	109±3	49±1	397±12	94±11	44±4	380±10	91±4	42±3

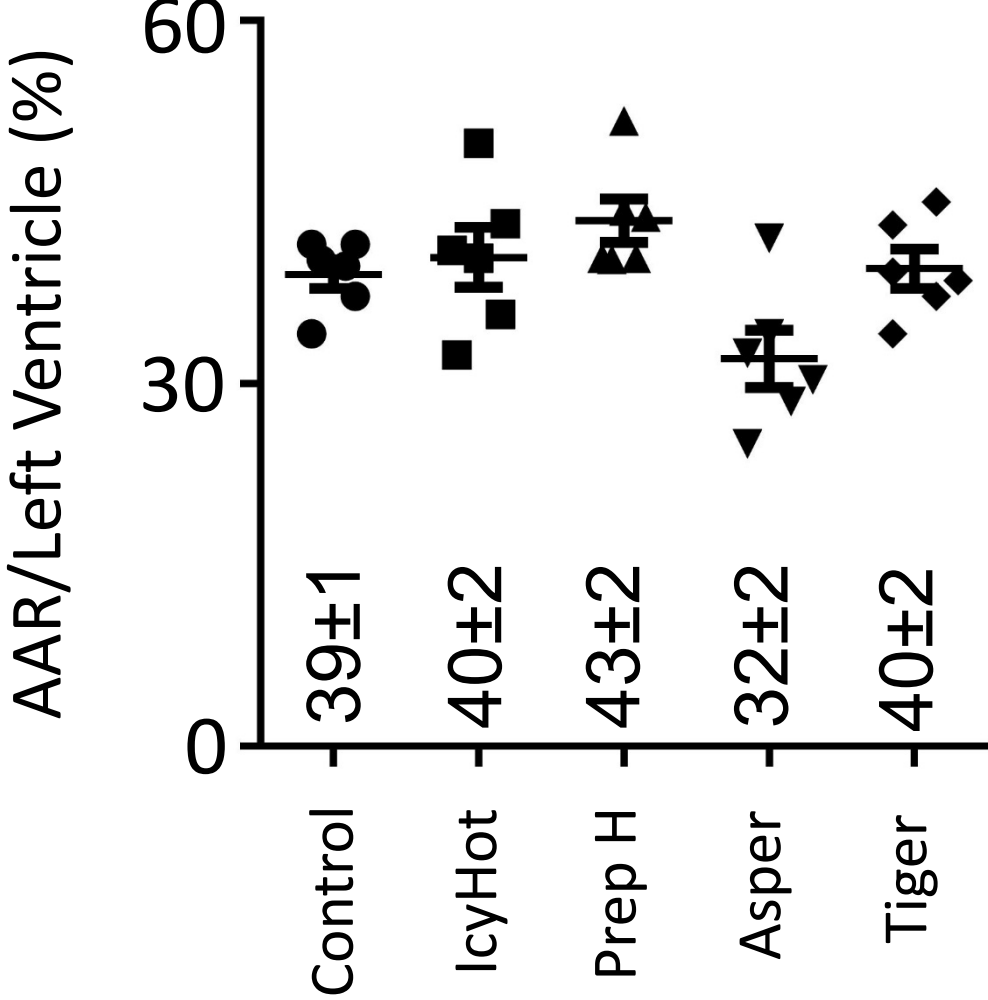
Supplemental Table 2.

	n	Baseline			15min Ischemia			2hr Reperfusion		
		HR	MAP	RPP	HR	MAP	RPP	HR	MAP	RPP
TCS+IcyHot	6	411±15	105±4	51±3	419±14	93±10	45±5	392±6	77±5 ⁺	38±2
AP+IcyHot	6	421±14	117±3	55±3	423±10	109±9	50±4	383±14	82±5 ⁺	38±3 ⁺
TCS	6	400±23	111±8	53±5	418±15	105±9	51±4	367±8	76±4 ⁺	41±3
AP	6	404±17	122±6	58±4	421±10	124±5	58±3	375±9	79±6 ⁺	41±3 ⁺

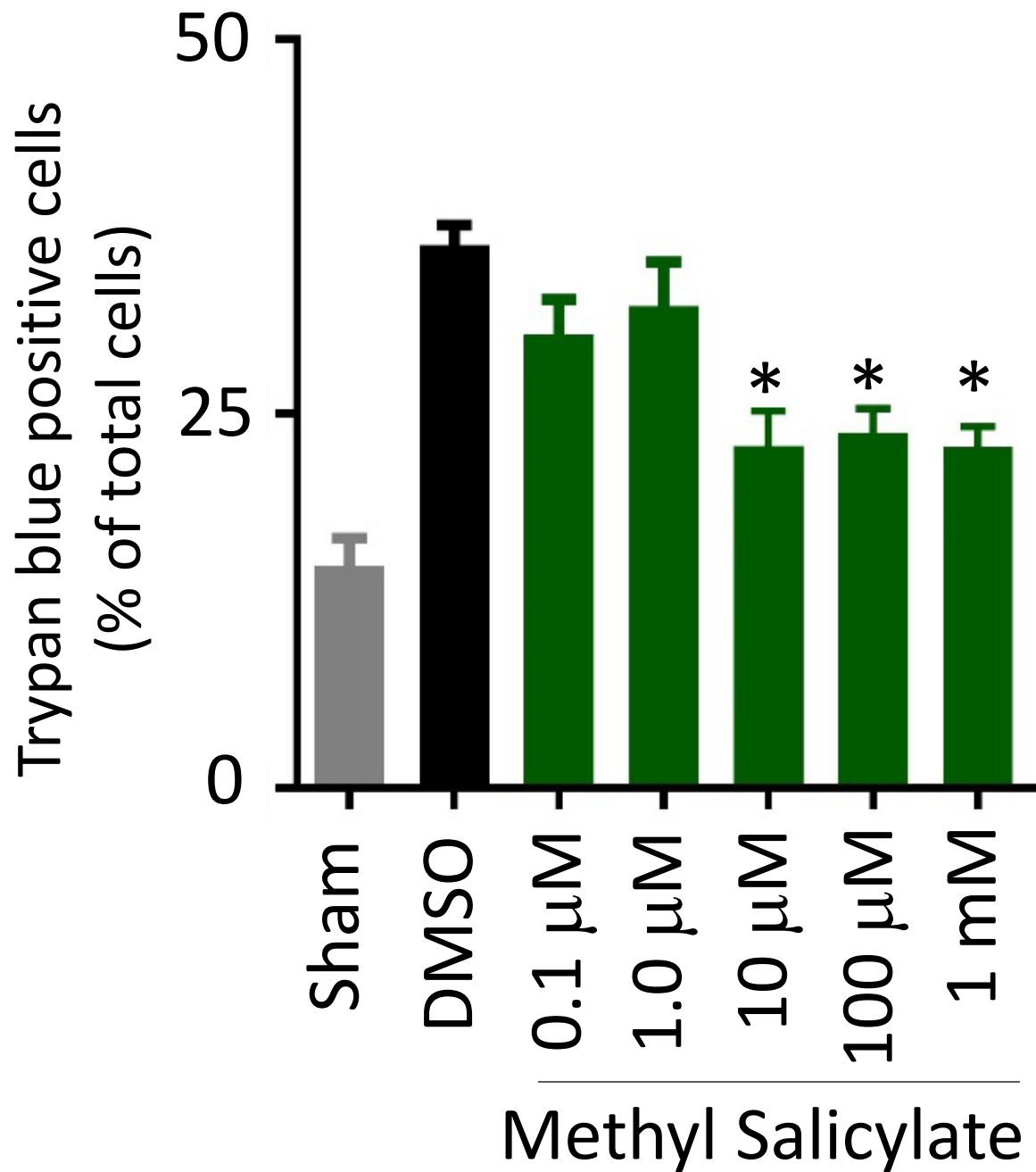
Supplemental Table 3.

	n	Baseline			15min Ischemia			2hr Reperfusion		
		HR	MAP	RPP	HR	MAP	RPP	HR	MAP	RPP
Control Ischemia	6	406±11	104±2	50±2	422±11	86±5	42±2	384±16	78±4 ⁺	38±3
IcyHot Ischemia	6	396±22	106±6	50±5	397±17	94±5	45±4	365±12	79±6 ⁺	36±3 ⁺
Control 24 hour	6	409±12	113±7	54±4	448±12	107±5	55±4	390±20	82±4 ⁺	41±4 ⁺
IcyHot 24 hour	6	417±9	132±4	65±2	411±14	116±10	58±6	357±5 ⁺	98±6 ⁺	44±3 ⁺

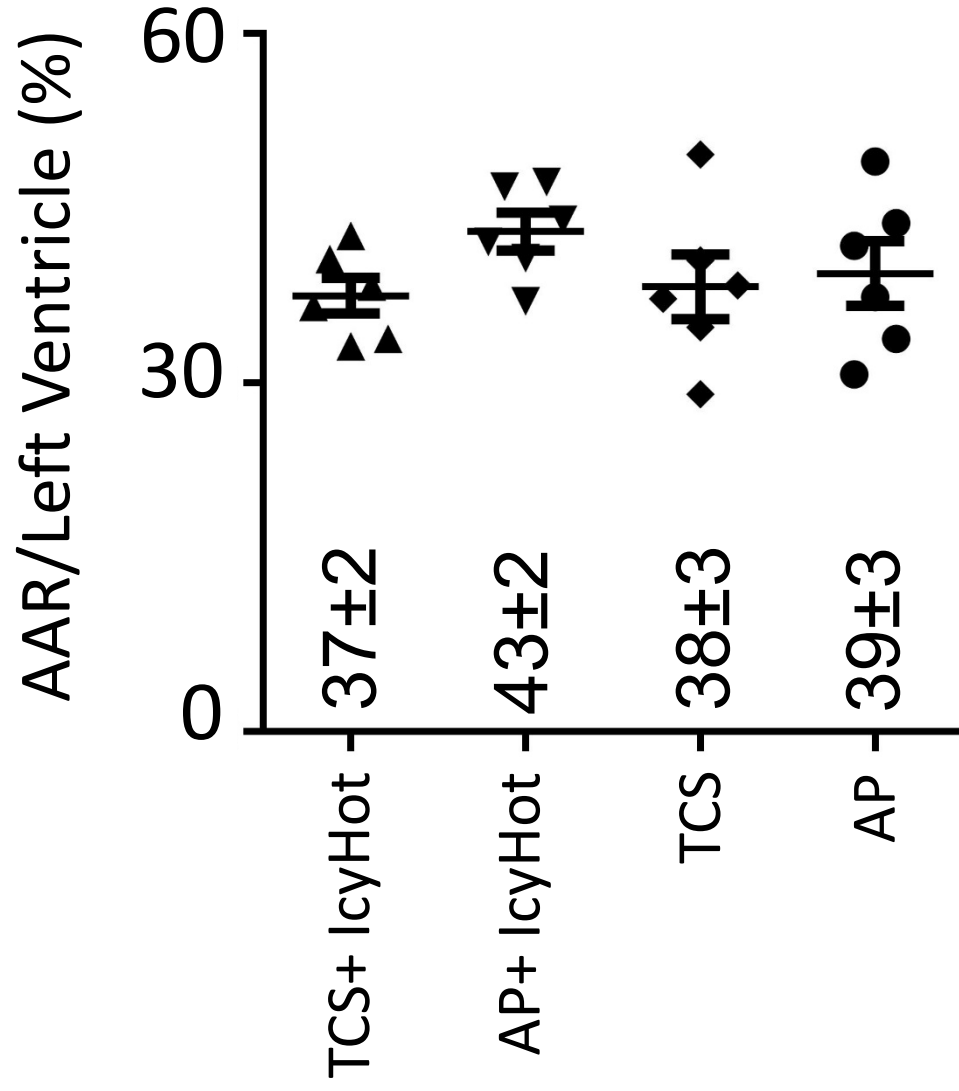
Supplemental Figure 1.



Supplemental Figure 2.

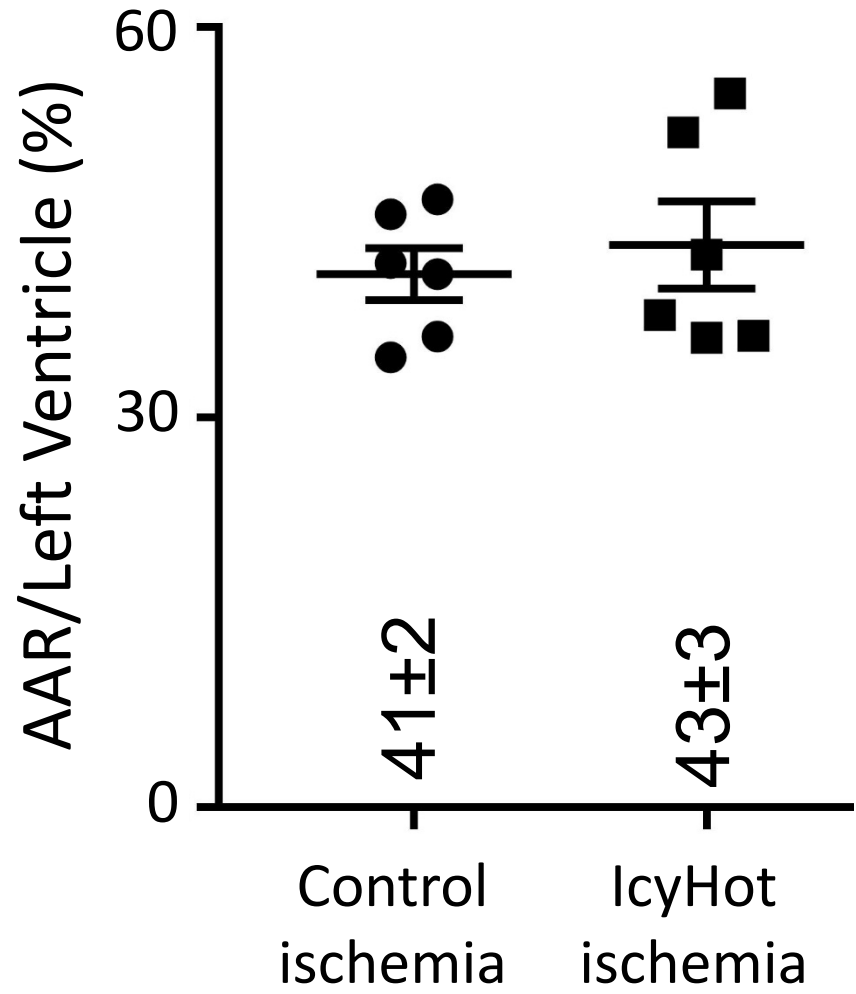


Supplemental Figure 3.



Supplemental Figure 4.

A.



B.

