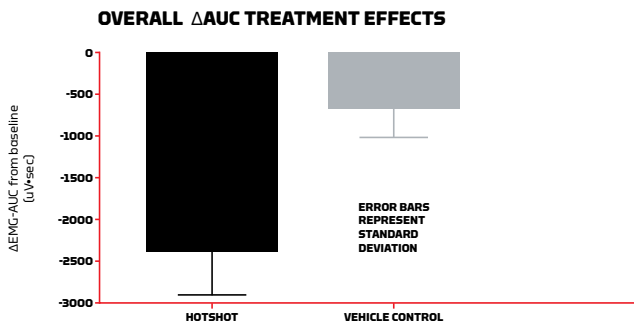


SCIENTIFIC STUDIES SHOW SIGNIFICANT EFFECT

ELECTRICALLY INDUCED MUSCLE CRAMPS

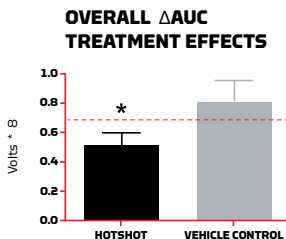
Significant effect on muscle cramp reduction with HOTSHOT has been shown in multiple randomized, blinded, vehicle-controlled studies in which volunteers consumed various formulations of TRP activators in a small beverage prior to an electrically induced muscle cramp.



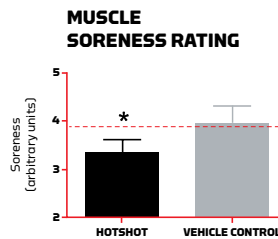
HOTSHOT demonstrates a statistically significant overall treatment effect in reducing muscle cramps when compared to vehicle control ($P < 0.01$) in a blinded, randomized cross-over study of 11 healthy volunteers, using an electrically induced muscle cramp model.

EXERCISE-ASSOCIATED MUSCLE CRAMPS & SORENESS

Effect of HOTSHOT was shown in a double-blind, vehicle-controlled, crossover study of 20 subjects who maximally contracted one calf muscle until cramping occurred. This research was conducted by Penn State University and presented at the Experimental Biology 2016 Conference.



Integrated EMG signal was significantly lower with HOTSHOT compared to Vehicle Control ($p = 0.01$). Dashed red line indicates the mean value for the final preconditioning trial.



Composite subjective ratings of muscle soreness from the first 20 minutes post-cramp. Soreness was significantly lower for HOTSHOT compared to vehicle control ($p = 0.02$). Dashed red line indicates the mean value for the final preconditioning trial.

FIELD STUDY: CRAMP PREVALENCE & RETURN TO PLAY

Of the 31 cramp-prone athletes, muscle cramps dropped over 50% during and after workouts when HOTSHOT was used 15-30 minutes before the workout. Athletes who did cramp returned to play faster.

