

**Supplement 1.** Scatter plots and box plots for all bivariate associations analyzed.

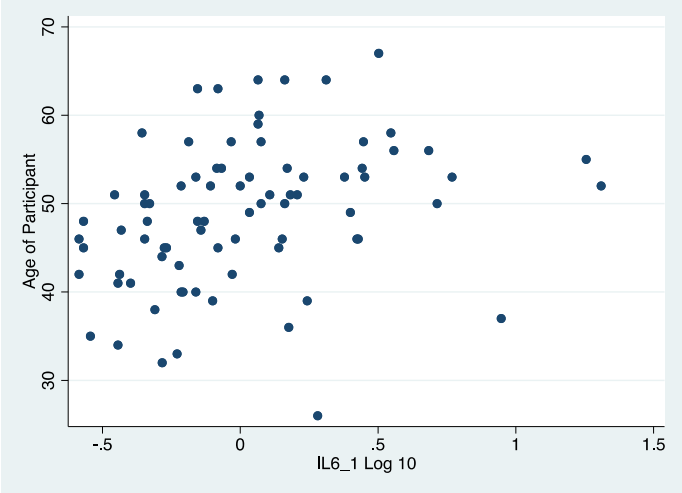


Figure S1. Age (years) vs log IL-6 (ng/mL)

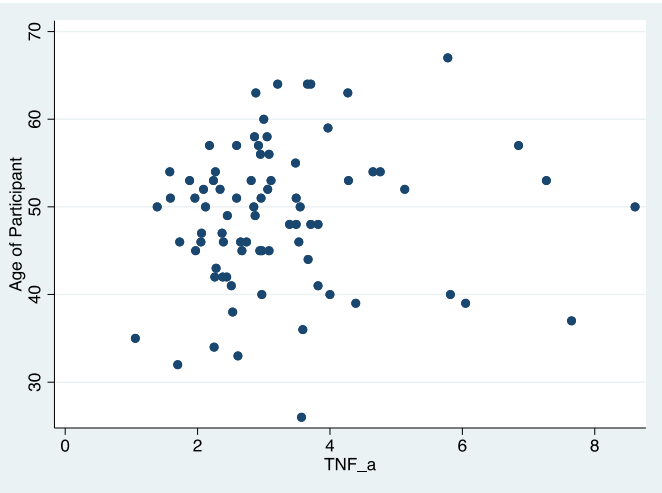


Figure S2. Age (years) versus TNFα (ng/mL)

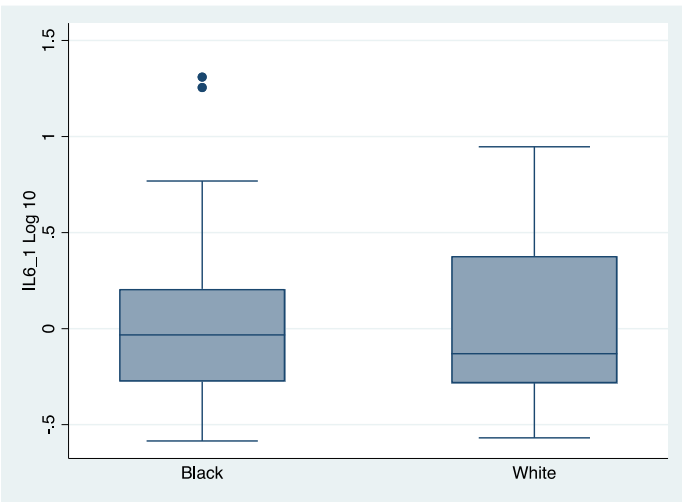


Figure S3. Log IL6 (ng/mL) by race

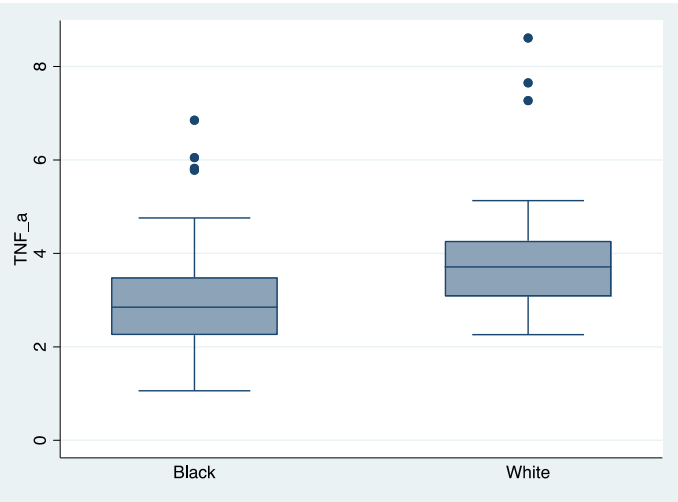


Figure S4. TNFα (ng/mL) by race

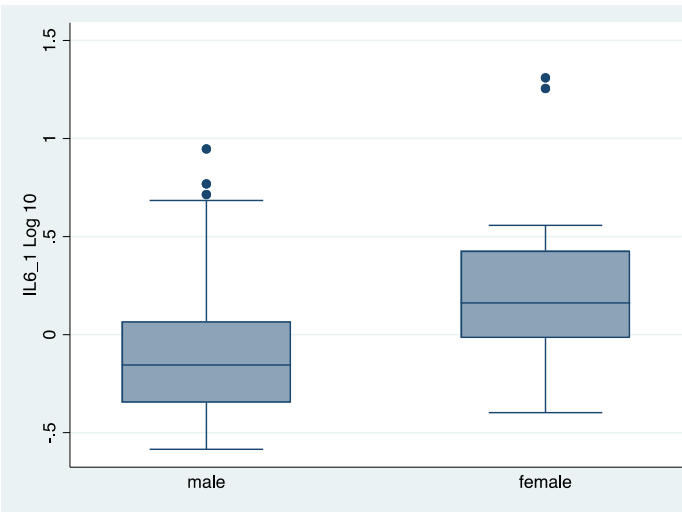
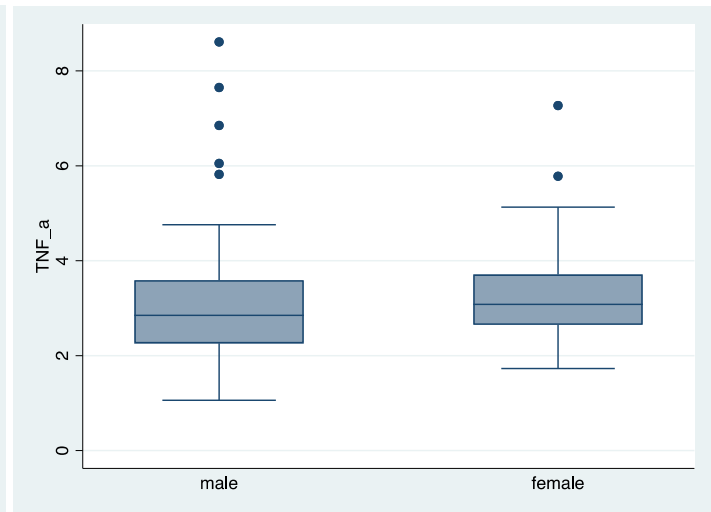


Figure S5. Log IL6 (ng/mL) by gender



FigureS6. TNFα (ng/mL) by gender

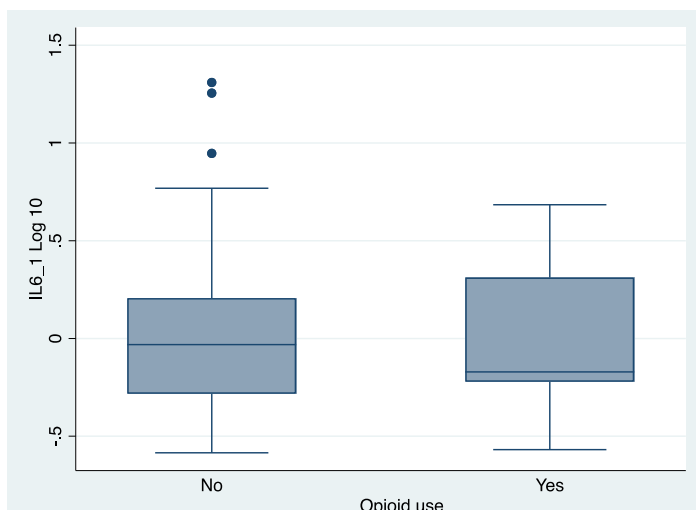


Figure S7. Log IL6 (ng/mL) by opioid use

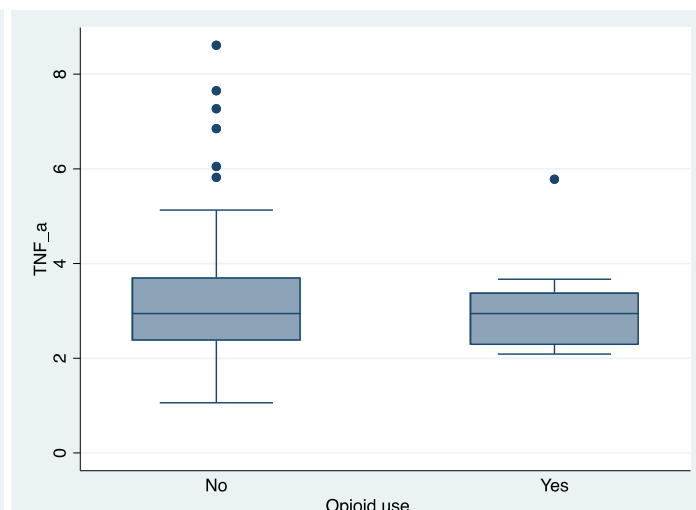


Figure S8. TNFα (ng/mL) by opioid use

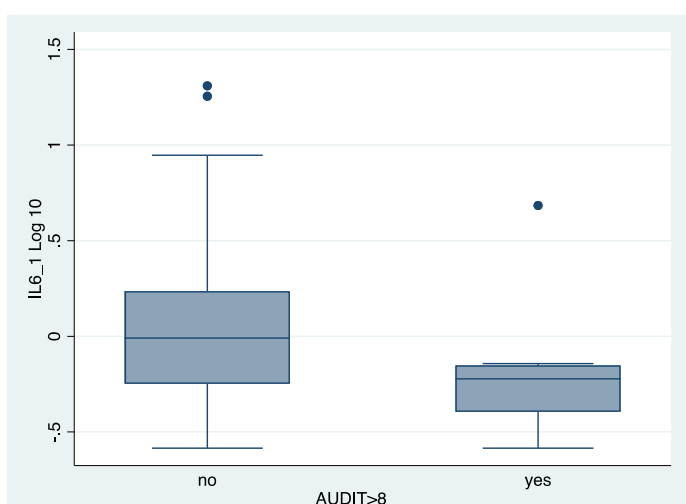


Figure S9. Log IL-6 (ng/mL) by no or low risk (<8) versus medium to high risk alcohol ( $\geq 8$ ) use assessed using the Alcohol Use Disorder Identification Test (AUDIT)

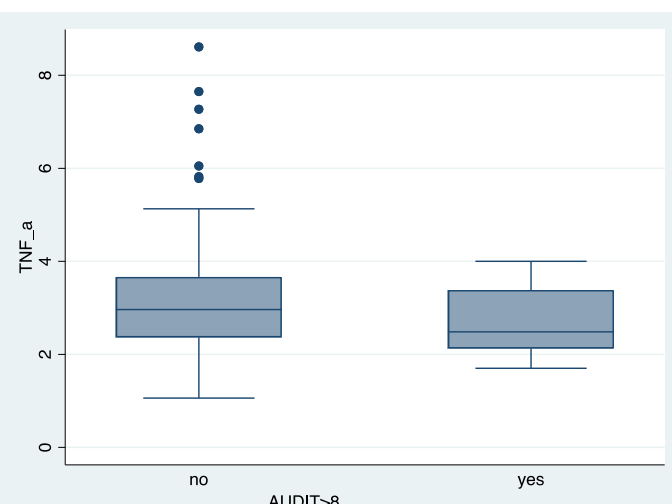


Figure S10. TNFα (ng/mL) by no or low risk (<8) versus medium to high risk ( $\geq 8$ ) alcohol use assessed using the Alcohol Use Disorder Identification Test (AUDIT)

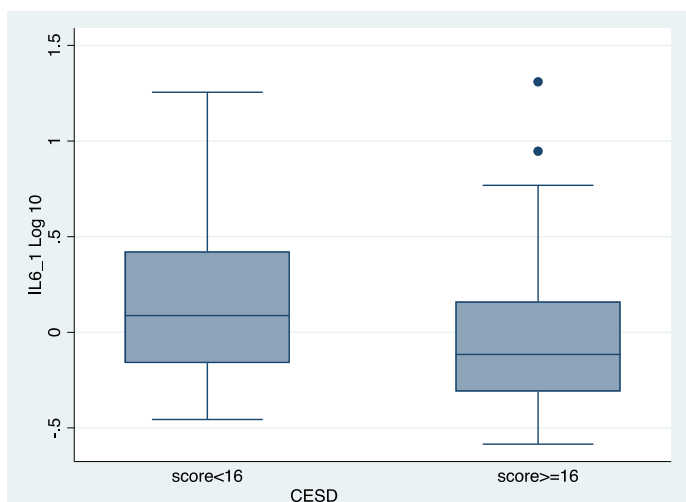


Figure S11. Log IL-6 (ng/mL) in those without symptoms of clinical depression (<16) versus those with symptoms of clinical depression ( $\geq 16$ ) assessed using the Center for epidemiological Studies Depression Scale (CESD)

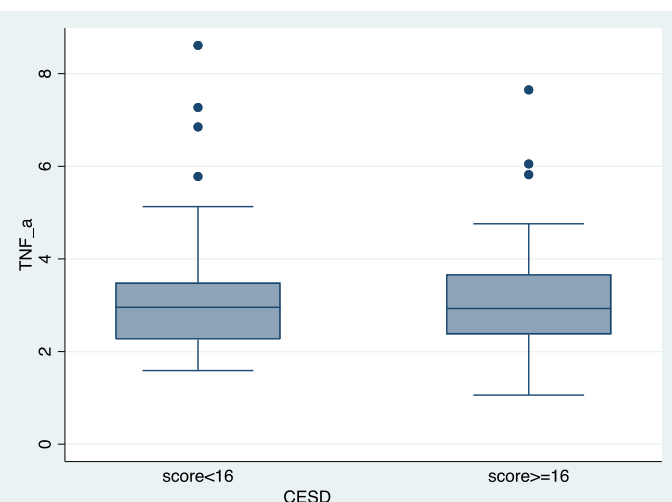


Figure S12. TNFα (ng/mL) in those without symptoms of clinical depression (<16) versus those with symptoms of clinical depression ( $\geq 16$ ) assessed with the Center for Epidemiological Studies Depression Scale (CESD).

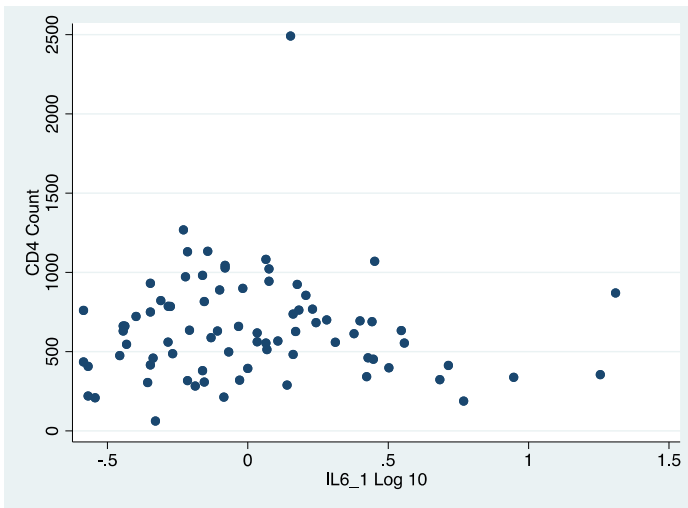


Figure S13. Log IL6 (ng/mL) versus CD4 count (cells/mL)

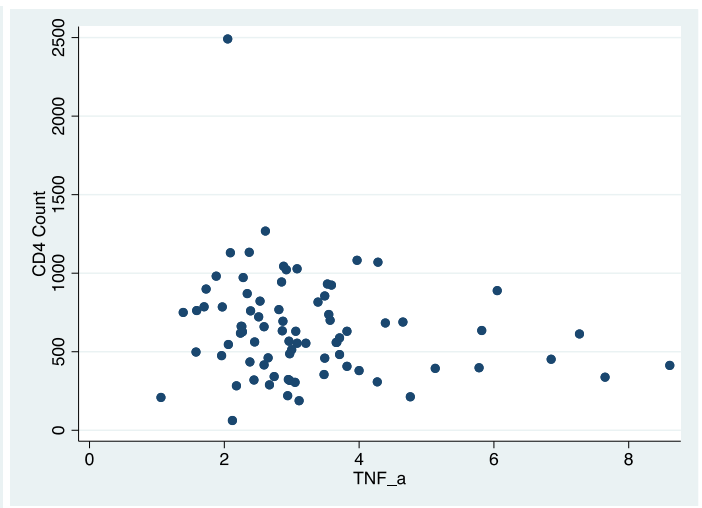


Figure S14. TNF $\alpha$  (ng/mL) versus CD4 count (cells/mL)

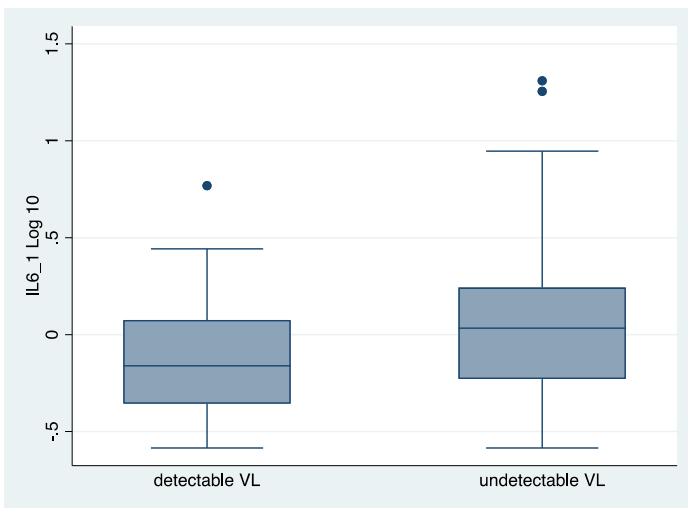


Figure S15. Log IL6 (ng/mL) by detectable versus undetectable HIV viral load

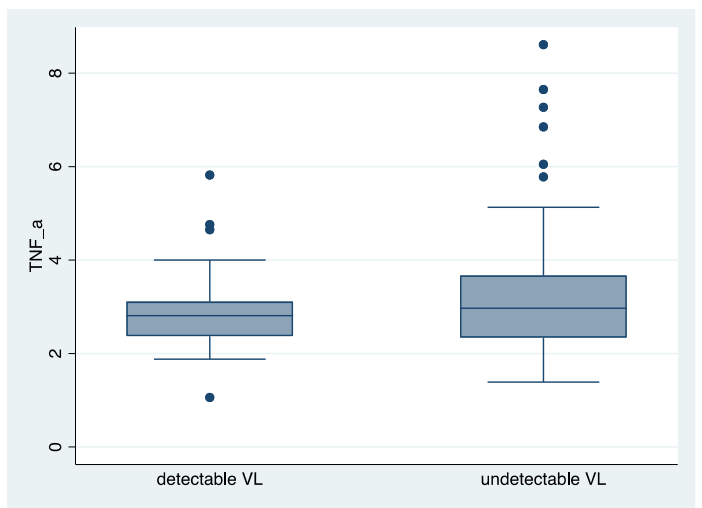


Figure S16. TNF $\alpha$  (ng/mL) by detectable versus undetectable HIV viral load

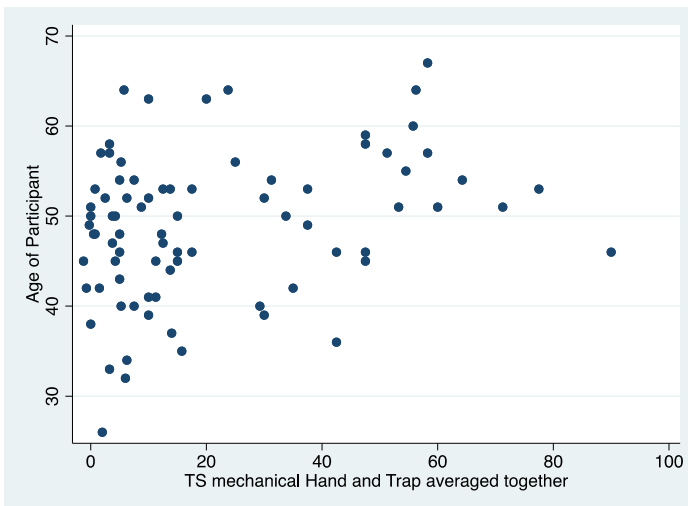


Figure S17. Temporal summation of mechanical pain at the hand and trapezius (scale 0-100) by age (years)

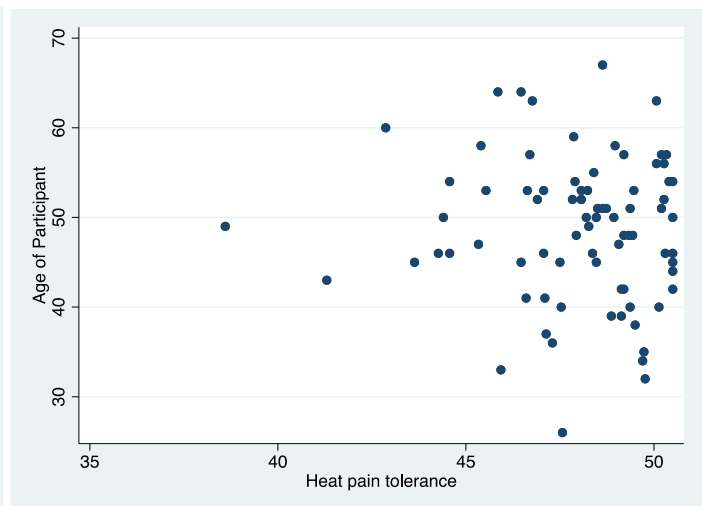


Figure S18. Heat pain tolerance (scale 0-100) versus age (years)

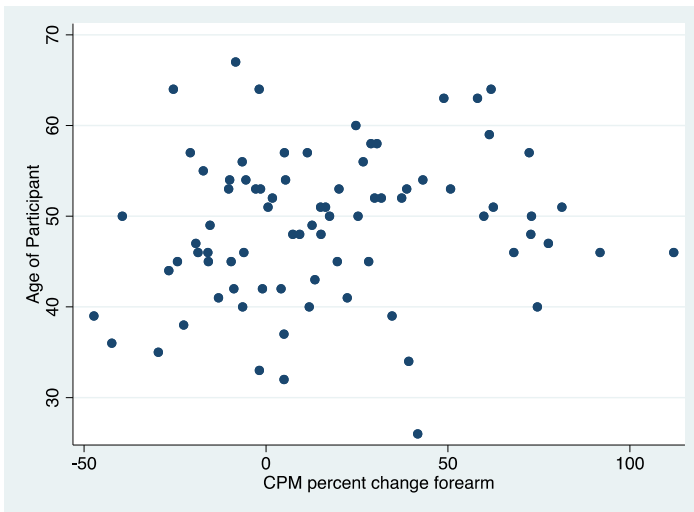


Figure S19. Percent change in conditioned pain modulation at the forearm versus age (years)

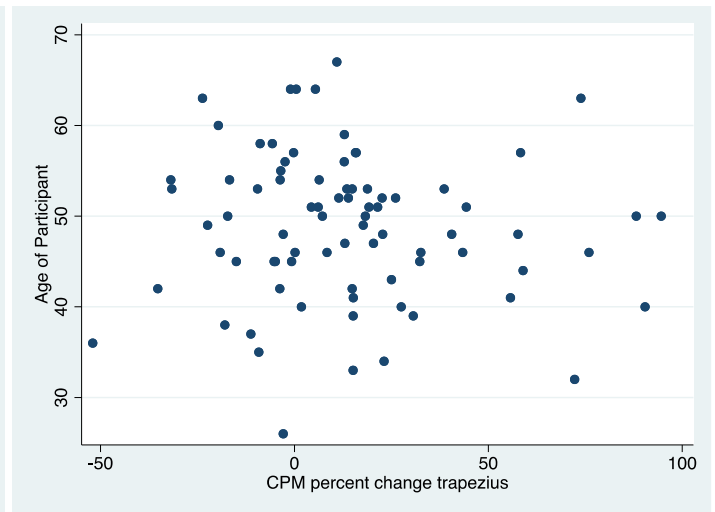


Figure S20. Percent change in conditioned pain modulation at the trapezius versus age (years)

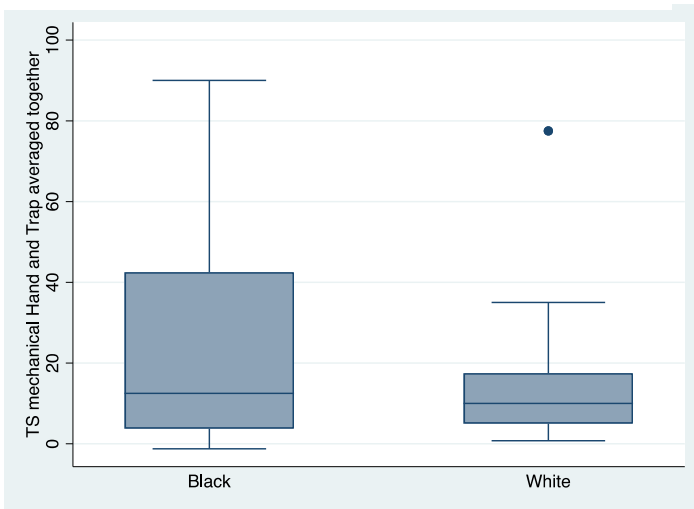


Figure S21. Temporal summation of mechanical pain (scale 0-100) at the hand and trapezius by

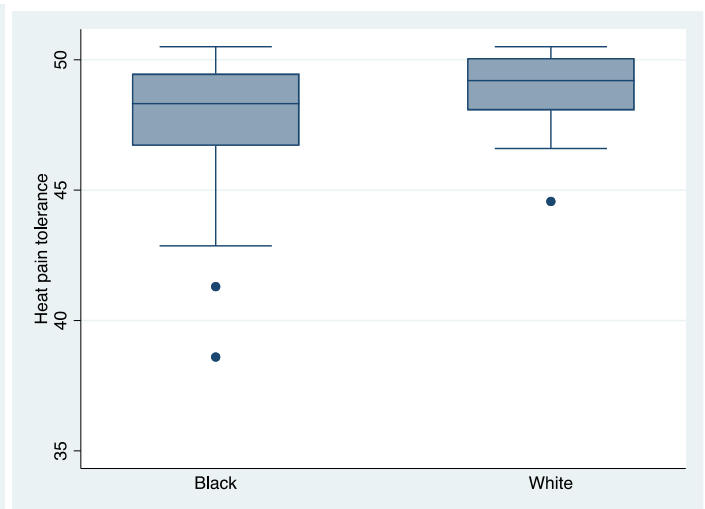


Figure S22. Heat pain tolerance (scale 0-100) by race

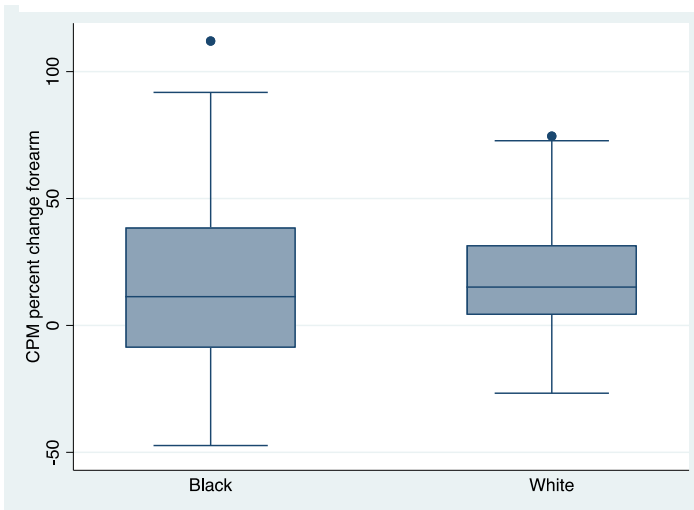


Figure S23. Percent change in conditioned pain modulation at the forearm by race

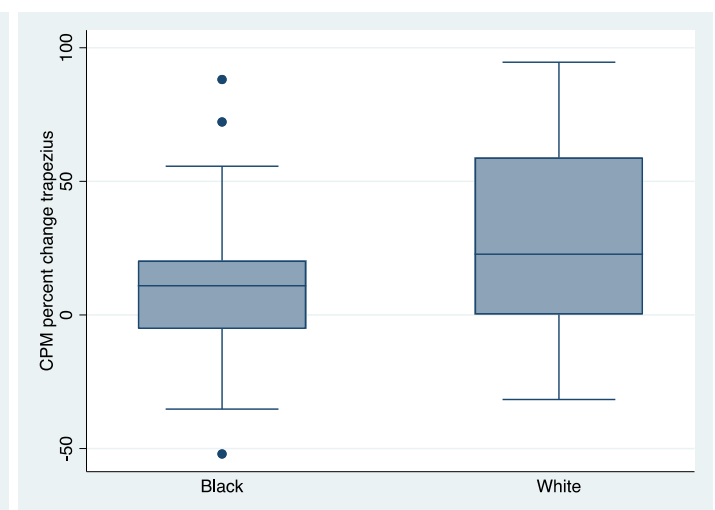


Figure S24. Percent change in conditioned pain modulation at the trapezius by race

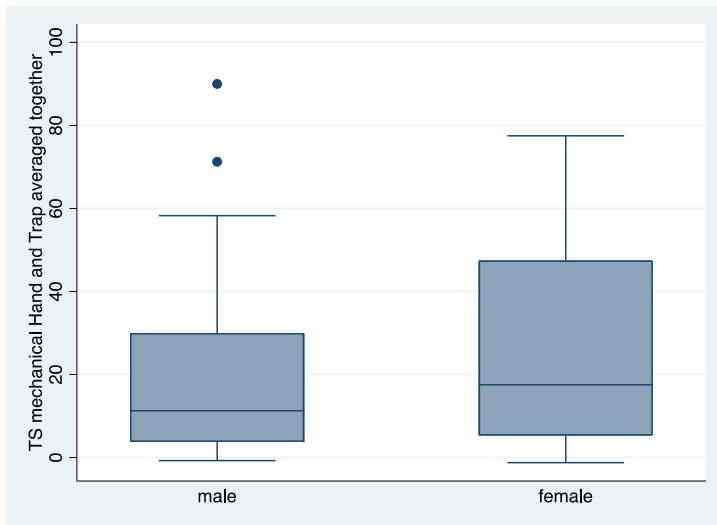


Figure S25. Temporal summation of mechanical pain (scale 0-100) at the hand and trapezius by

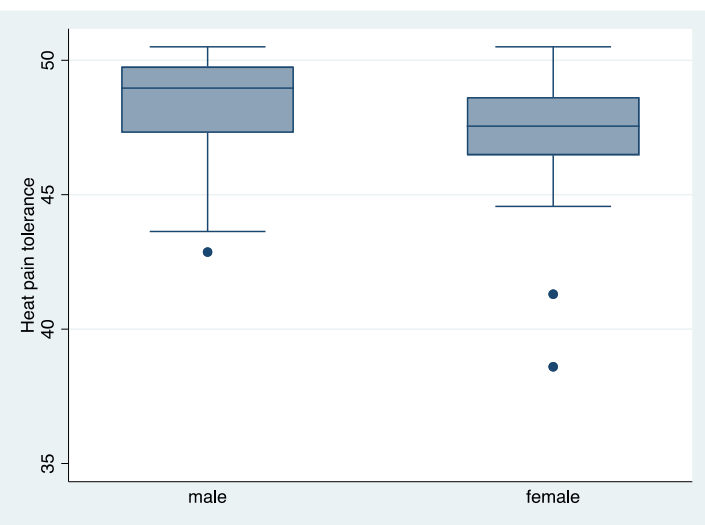


Figure S26. Heat pain tolerance (scale 0-100) by gender

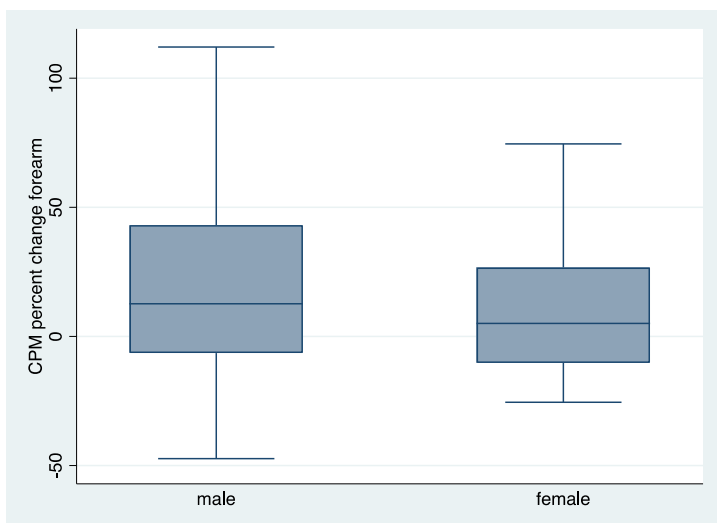


Figure S27. Percent change in conditioned pain modulation at the forearm by gender

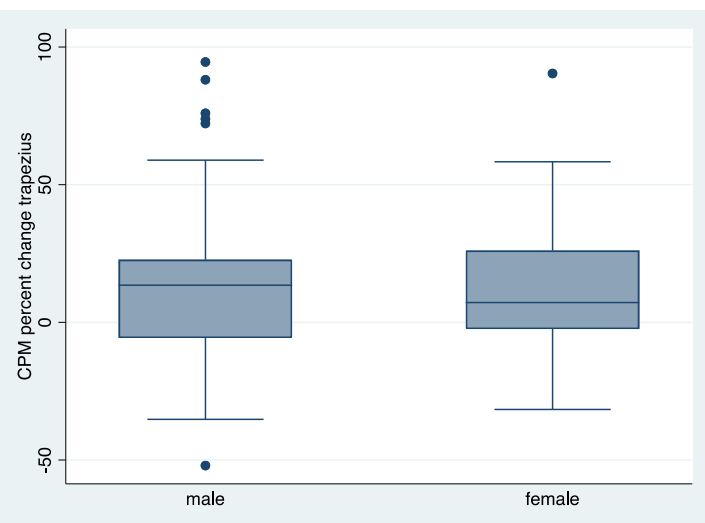


Figure S28. Percent change in conditioned pain modulation at the trapezius by gender

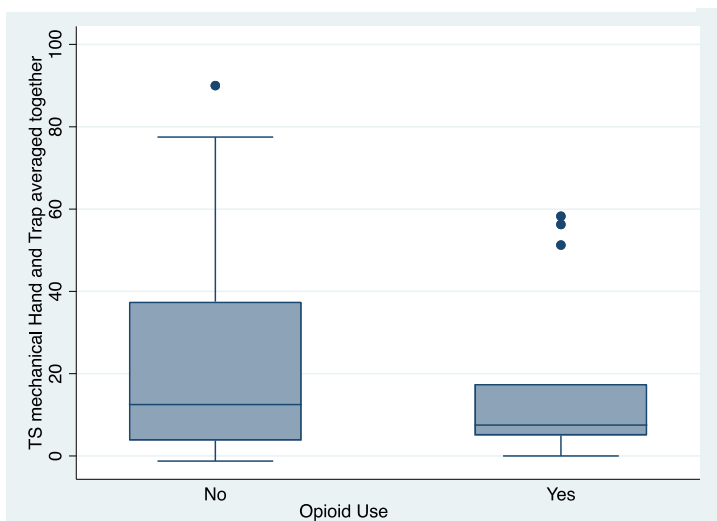


Figure S29. Temporal summation of mechanical pain (scale 0-100) at the hand and trapezius by opioid use

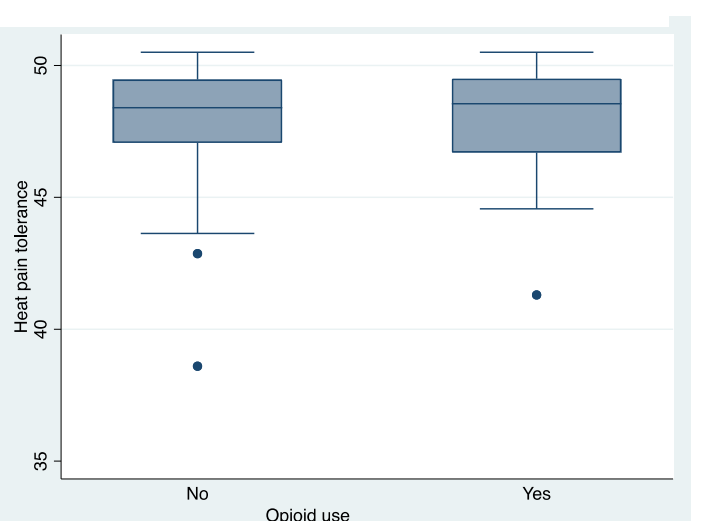


Figure S30. Heat pain tolerance (scale 0-100) by opioid use

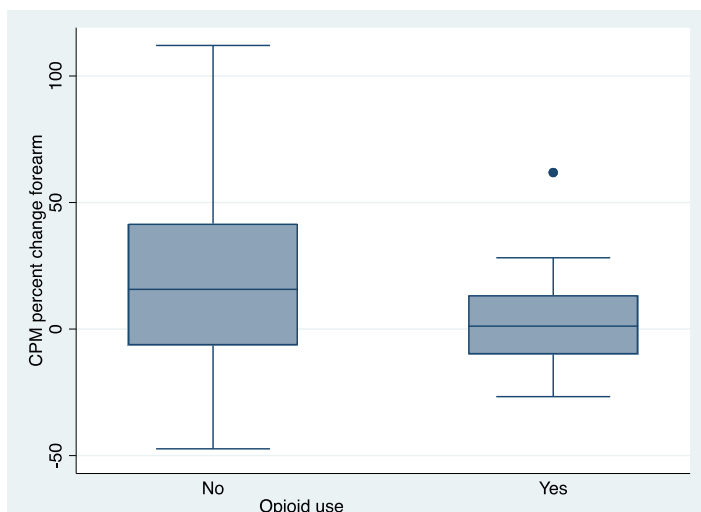


Figure S31. Percent change in conditioned pain modulation at the forearm by opioid use

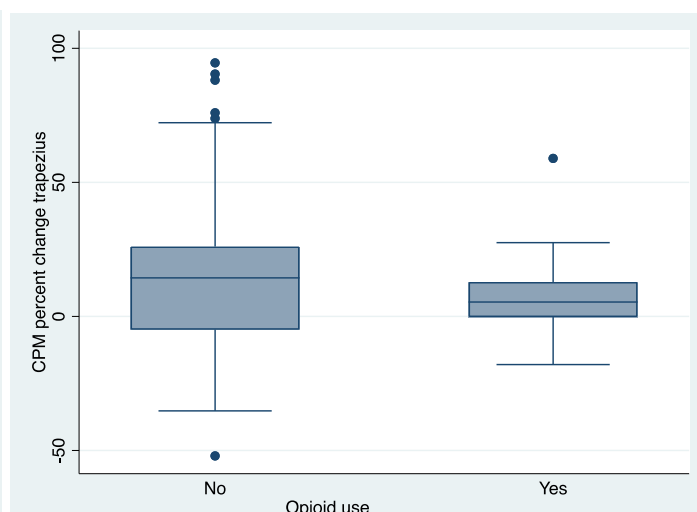


Figure S32. Percent change in conditioned pain modulation at the trapezius by opioid use

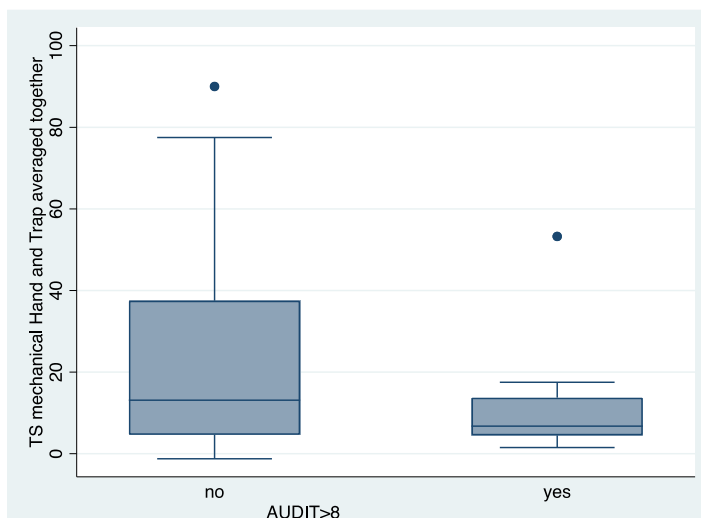


Figure S29. Temporal summation of mechanical pain at the hand and trapezius (scale 0-100) by no or low risk (<8) versus medium to high risk alcohol ( $\geq 8$ ) use assessed using the alcohol use disorder identification test (AUDIT)

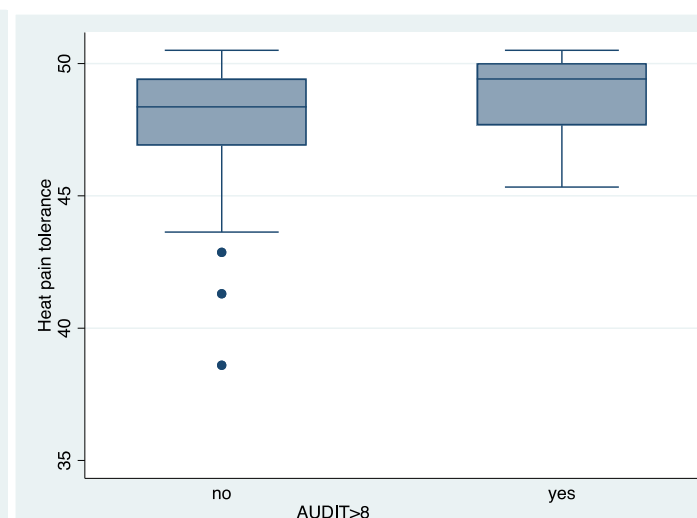


Figure S30. Heat pain tolerance (scale 0-100) by no or low risk (<8) versus medium to high risk ( $\geq 8$ ) alcohol use assessed using the alcohol use disorder identification test (AUDIT).

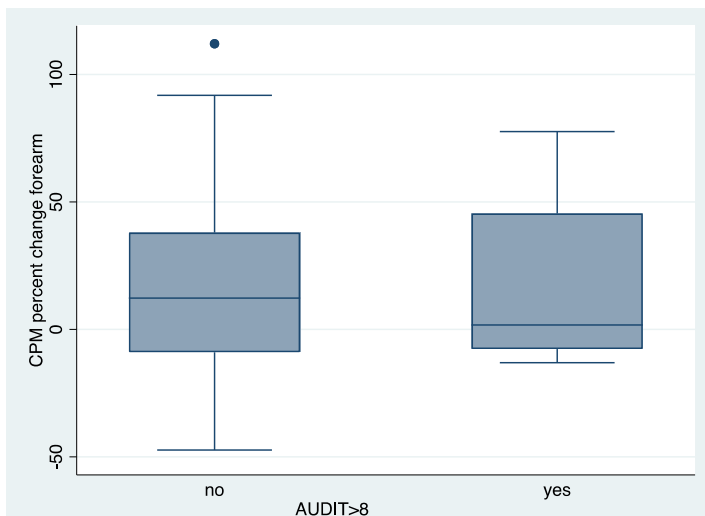


Figure S31. Percent change in conditioned pain modulation at the forearm by no or low risk (<8) versus medium to high risk alcohol (≥8) use assessed using the alcohol use disorder identification test (AUDIT)

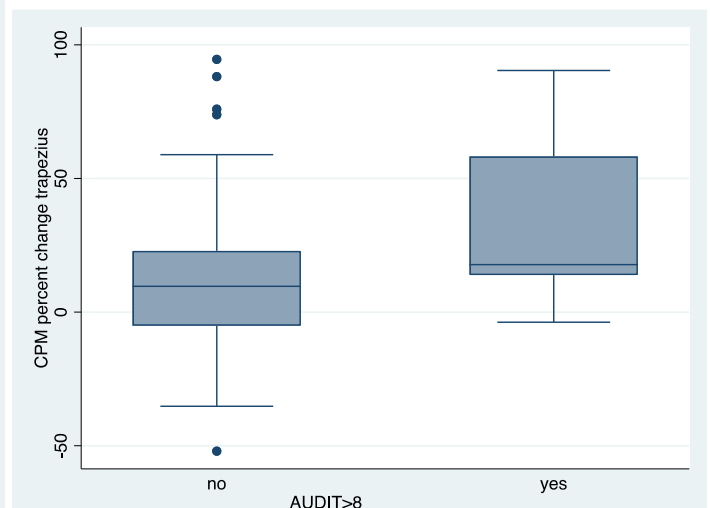


Figure S32. Percent change in conditioned pain modulation at the trapezius by opioid use by no or low risk (<8) versus high risk alcohol (>8) use using the alcohol use disorder identification test (AUDIT)

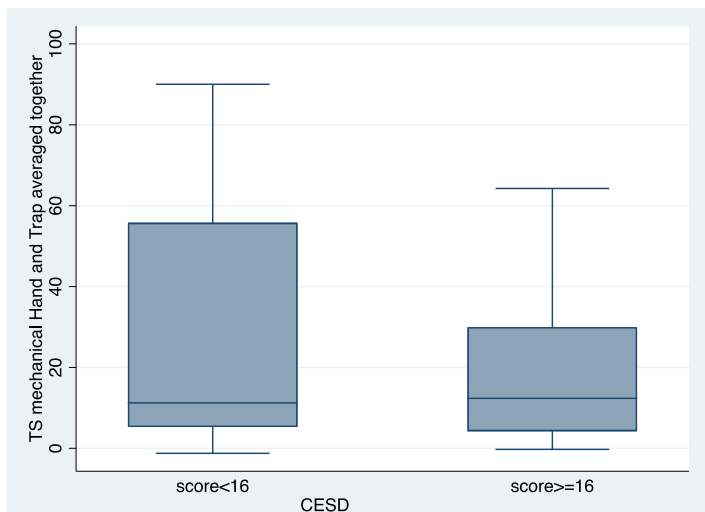


Figure S33. Temporal summation of mechanical pain at the hand and trapezius (scale 0-100) in those without symptoms of clinical depression (<16) versus those with symptoms of clinical depression (≥16) assessed with the Center for Epidemiological Studies Scale (CESD)

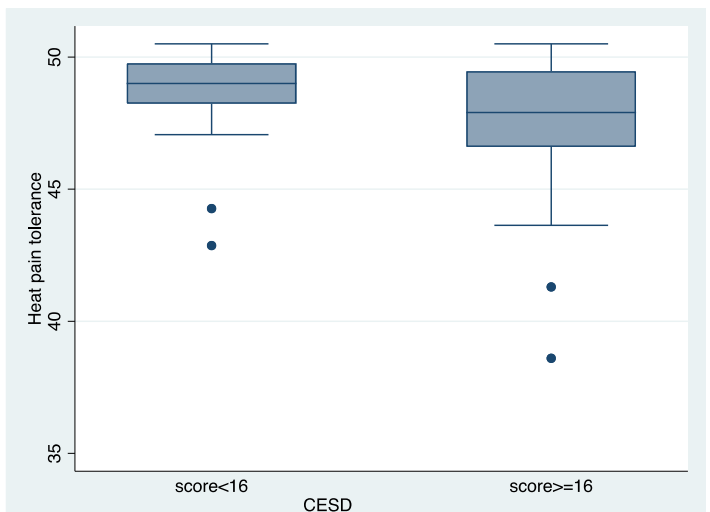


Figure S34. Heat pain tolerance (scale 0-100) in those without symptoms of clinical depression (<16) versus those with symptoms of clinical depression (≥16) assessed with the Center for Epidemiological Studies Scale (CESD)

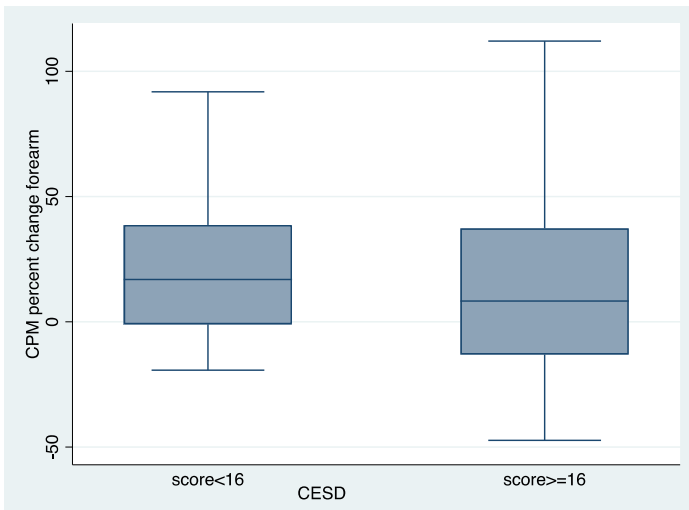


Figure S35. Percent change in conditioned pain modulation at the forearm in those without symptoms of clinical depression (<16) versus those with symptoms of clinical depression ( $\geq 16$ ) assessed with the Center for Epidemiological Studies Scale (CESD)

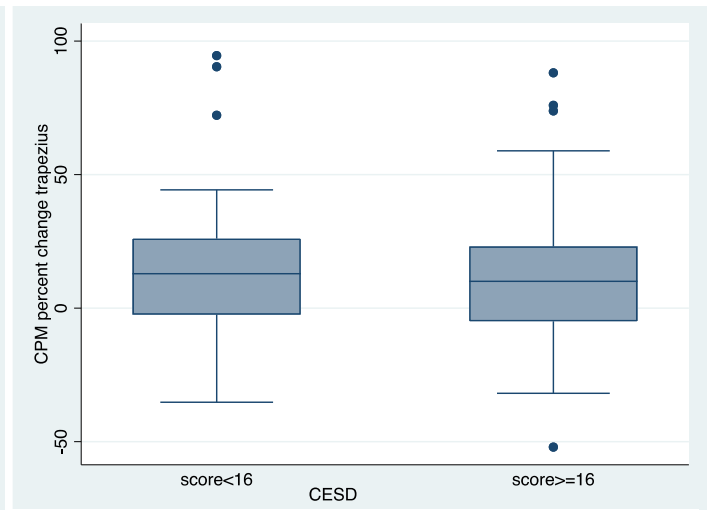


Figure S36. Percent change in conditioned pain modulation at the trapezius in those without symptoms of clinical depression (<16) versus those with symptoms of clinical depression ( $\geq 16$ ) assessed with the Center for Epidemiological Studies Scale (CESD)

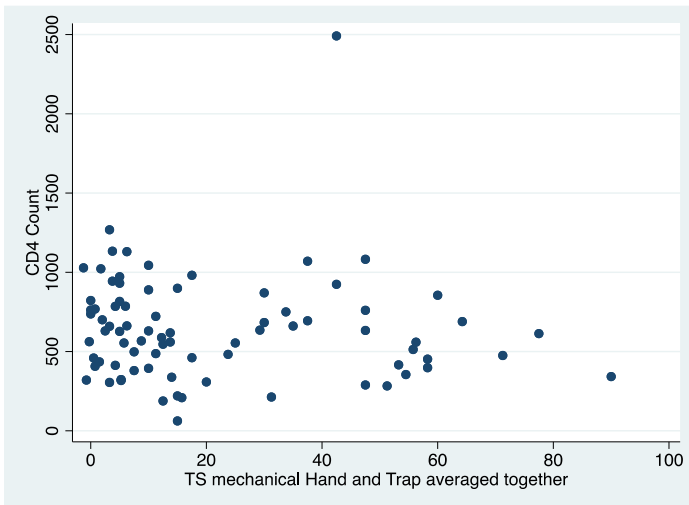


Figure S37. Temporal summation at the hand and the trapezius (scale 0-100) versus CD4 count (cells/mL)

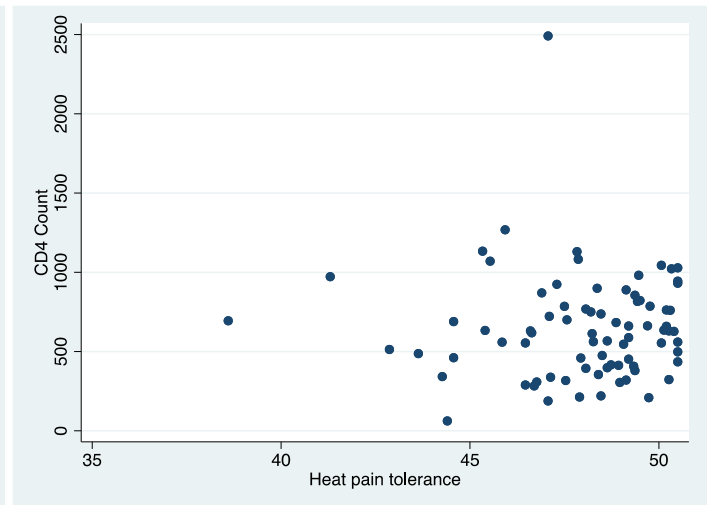


Figure S38. Heat pain tolerance (scale 0-100) versus CD4 count (cells/mL)



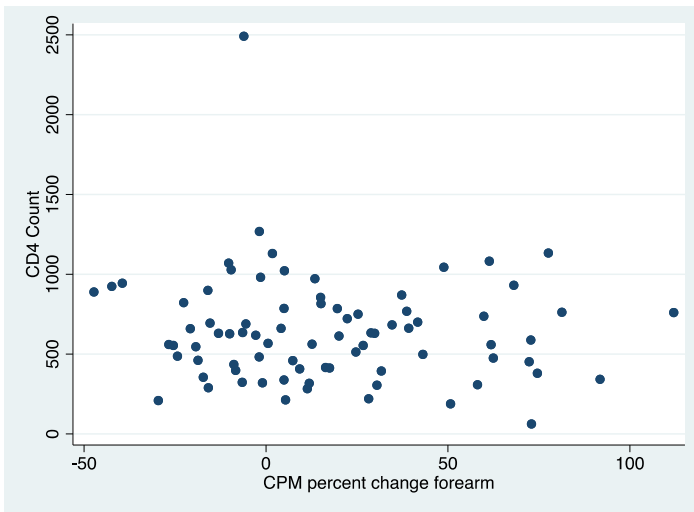


Figure S39. Percent change in conditioned pain modulation at the forearm versus CD4 count (cells/mL)

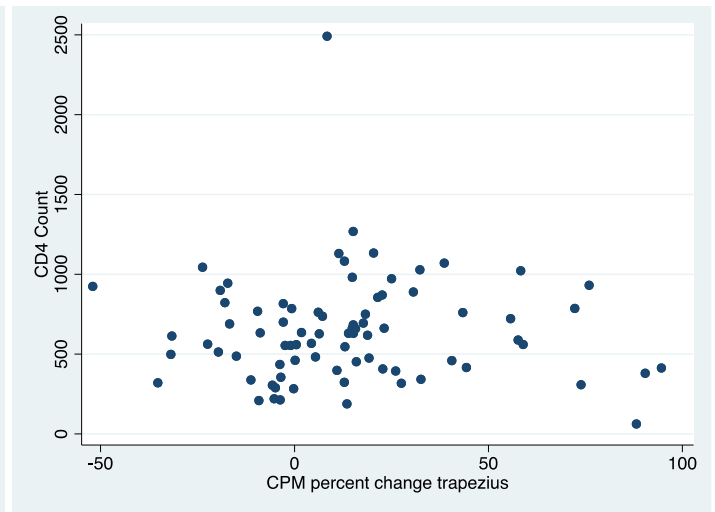


Figure S40. Percent change in conditioned pain modulation at the trapezius versus CD4 count (cells/mL)

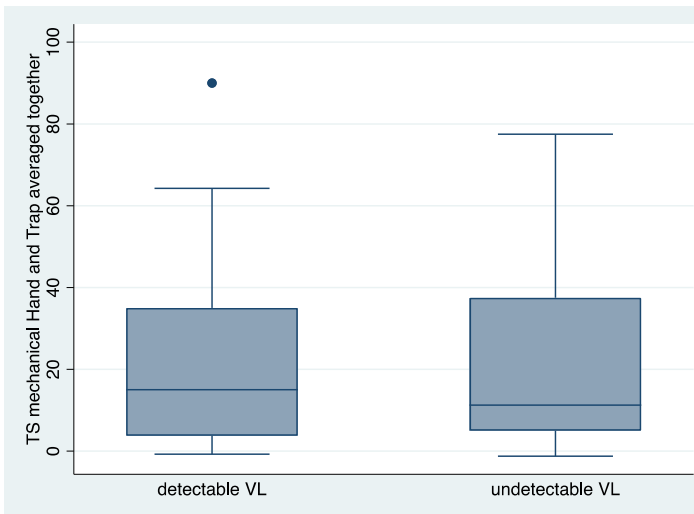


Figure S41. Temporal summation at the hand and the trapezius (scale 0-100) by detectable versus undetectable HIV viral load

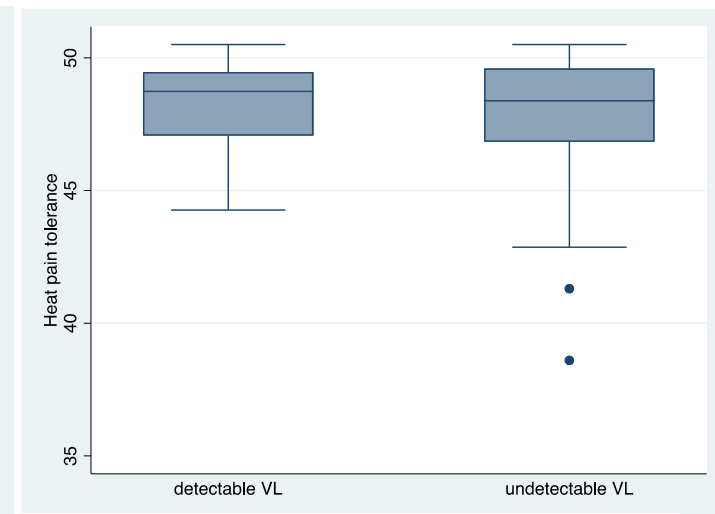


Figure S42. Heat pain tolerance (scale 0-100) by detectable versus undetectable HIV viral load

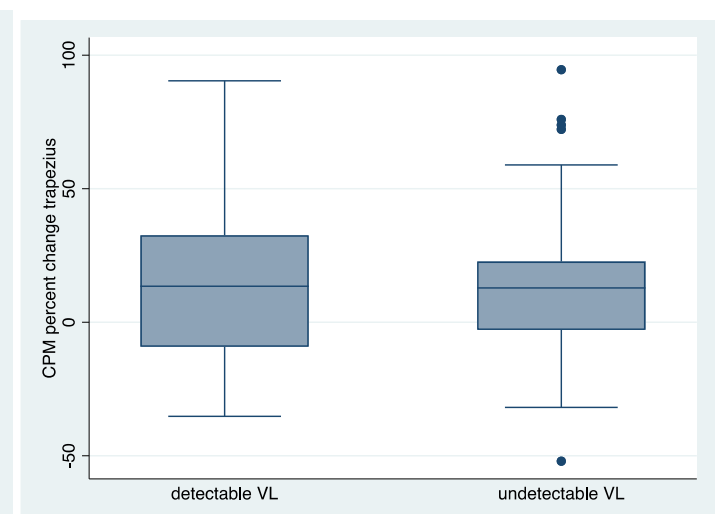
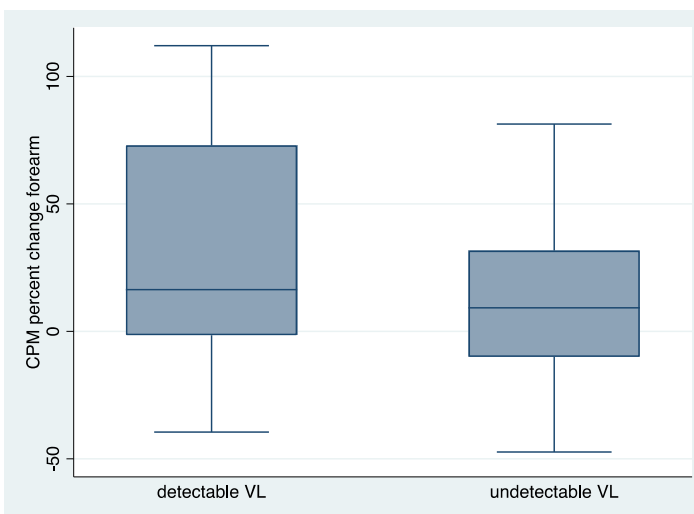


Figure S43. Percent change in conditioned pain modulation at the forearm by detectable versus undetectable HIV viral load



Figure S45. Temporal summation at the hand and the trapezius (scale 0-100) by logIL-6 (ng/mL)

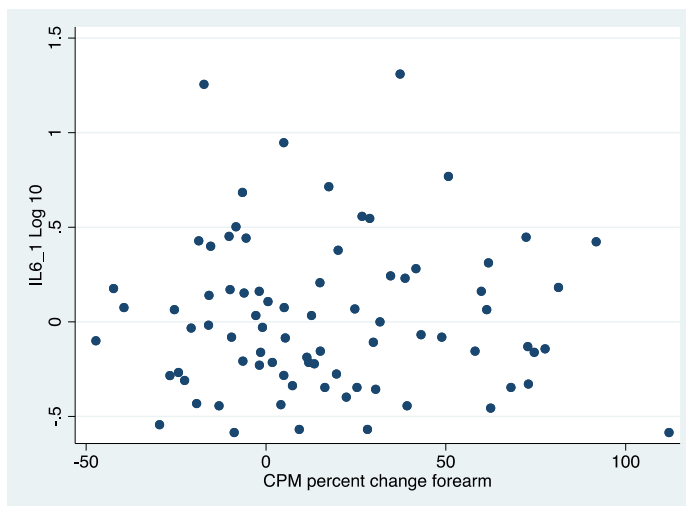


Figure S47. Percent change in conditioned pain modulation at the forearm by logIL-6 (ng/mL)

Figure S44. Percent change in conditioned pain modulation at the trapezius by detectable versus undetectable HIV viral load

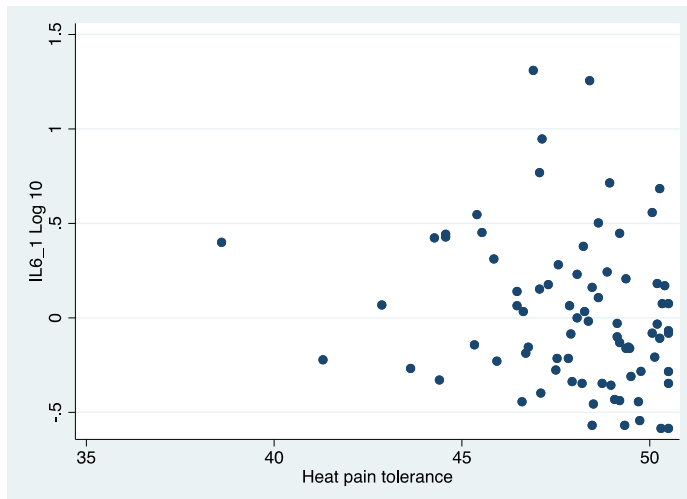


Figure S46. Heat pain tolerance (scale 0-100) by logIL-6 (ng/mL)

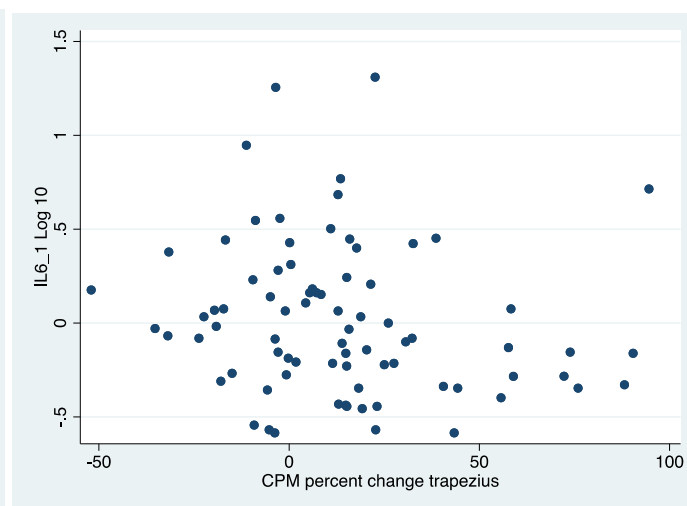


Figure S48. Percent change in conditioned pain modulation at the trapezius by logIL-6 (ng/mL)

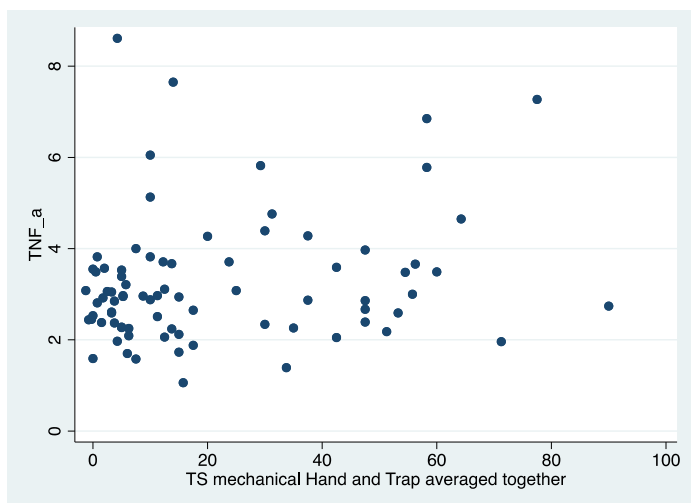


Figure S49. Temporal summation at the hand and the trapezius (scale 0-100) by TNF $\alpha$  (ng/mL)

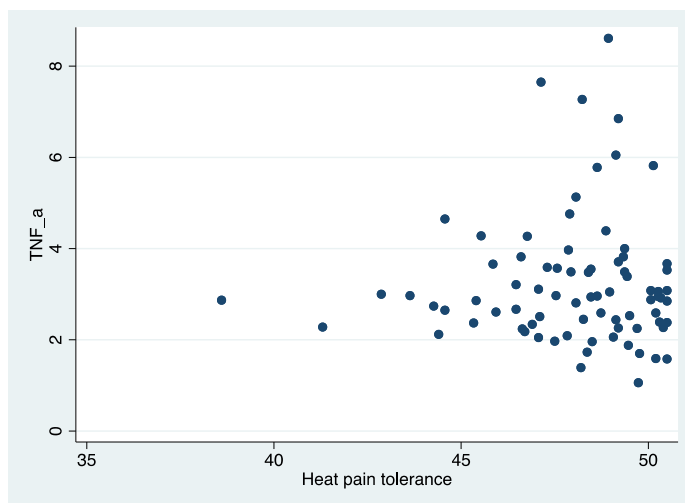


Figure S50. Heat pain tolerance (scale 0-100) by TNF $\alpha$  (ng/mL)

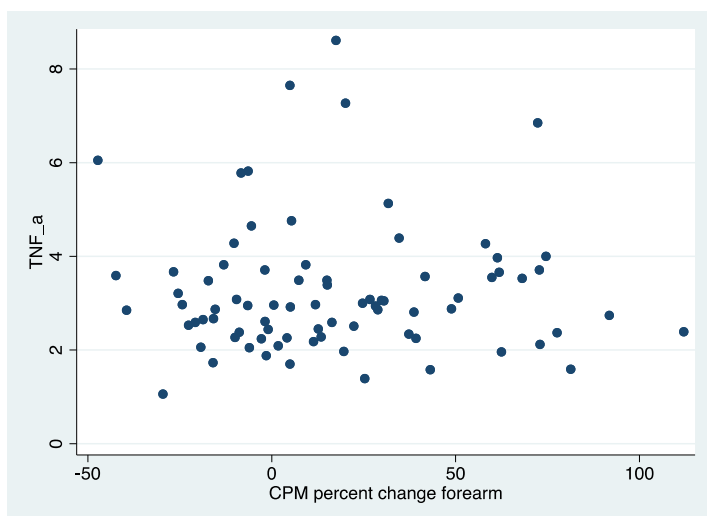


Figure S51. Percent change in conditioned pain modulation at the forearm by TNF $\alpha$  (ng/mL)

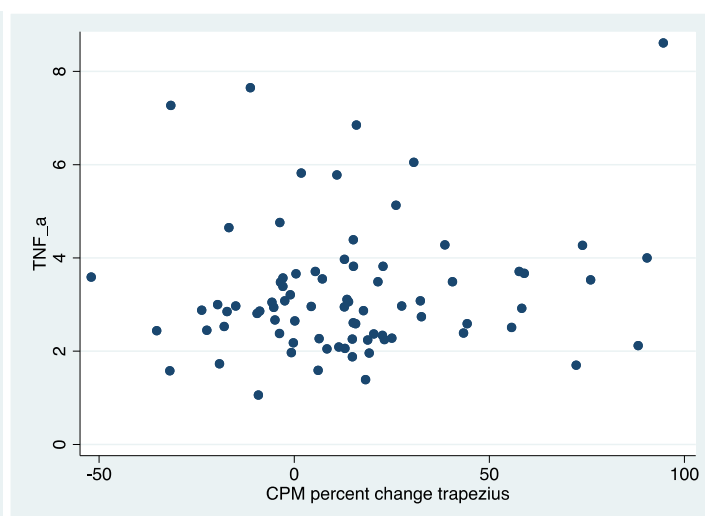


Figure S52. Percent change in conditioned pain modulation at the trapezius by TNF $\alpha$  (ng/mL)

## Supplement 2. Additional analyses

| Table S1. Multivariable linear regression analysis evaluating how age affects temporal summation of mechanical pain at the hand |                  |          |               |
|---------------------------------------------------------------------------------------------------------------------------------|------------------|----------|---------------|
|                                                                                                                                 | Beta-Coefficient | <i>p</i> | 95% CI        |
| Age, years                                                                                                                      | 0.53             | 0.09     | -0.09, 1.14   |
| Race <sup>a</sup>                                                                                                               | -8.75            | 0.151    | -20.77, 3.26  |
| Gender <sup>b</sup>                                                                                                             | 7.07             | 0.18     | -3.40, 17.53  |
| Depression                                                                                                                      | -10.73           | 0.05     | -21.38, -0.08 |
| <sup>a</sup> compared with black race; <sup>b</sup> compared with male gender                                                   |                  |          |               |