|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Two-way ANOVA | Ordinary |  |  |  |  |
| Alpha | 0.05 |  |  |  |  |
|  |  |  |  |  |  |
| Source of Variation | % of total variation | P value | P value summary | Significant? |  |
| Interaction | 10.62 | <0.0001 | \*\*\*\* | Yes |  |
| Row Factor | 17.71 | <0.0001 | \*\*\*\* | Yes |  |
| Column Factor | 61.44 | <0.0001 | \*\*\*\* | Yes |  |
|  |  |  |  |  |  |
| ANOVA table | SS | DF | MS | F (DFn, DFd) | P value |
| Interaction | 10.26 | 4 | 2.566 | F (4, 110) = 28.57 | P<0.0001 |
| Row Factor | 17.11 | 4 | 4.278 | F (4, 110) = 47.64 | P<0.0001 |
| Column Factor | 59.36 | 1 | 59.36 | F (1, 110) = 661.0 | P<0.0001 |
| Residual | 9.878 | 110 | 0.08980 |  |  |

Sham vs SNI mechanical withdraw

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sham - SNI |  |  |  |  |  |
| baseline | 0.2833 | -0.03645 to 0.6031 | No | ns | 0.1072 |
| 1 | 1.667 | 1.347 to 1.986 | Yes | \*\*\*\* | <0.0001 |
| 3 | 1.925 | 1.605 to 2.245 | Yes | \*\*\*\* | <0.0001 |
| 7 | 1.742 | 1.422 to 2.061 | Yes | \*\*\*\* | <0.0001 |
| 14 | 1.417 | 1.097 to 1.736 | Yes | \*\*\*\* | <0.0001 |

Sham vs SNI thermal withdraw latency

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Two-way ANOVA | Ordinary |  |  |  |  |
| Alpha | 0.05 |  |  |  |  |
|  |  |  |  |  |  |
| Source of Variation | % of total variation | P value | P value summary | Significant? |  |
| Interaction | 14.70 | <0.0001 | \*\*\*\* | Yes |  |
| Row Factor | 9.899 | <0.0001 | \*\*\*\* | Yes |  |
| Column Factor | 47.43 | <0.0001 | \*\*\*\* | Yes |  |
|  |  |  |  |  |  |
| ANOVA table | SS | DF | MS | F (DFn, DFd) | P value |
| Interaction | 841.0 | 4 | 210.3 | F (4, 110) = 14.46 | P<0.0001 |
| Row Factor | 566.2 | 4 | 141.6 | F (4, 110) = 9.734 | P<0.0001 |
| Column Factor | 2713 | 1 | 2713 | F (1, 110) = 186.6 | P<0.0001 |
| Residual | 1600 | 110 | 14.54 |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sham - SNI |  |  |  |  |  |
| baseline | -0.2417 | -4.311 to 3.828 | No | ns | >0.9999 |
| 1 | 9.025 | 4.956 to 13.09 | Yes | \*\*\*\* | <0.0001 |
| 3 | 13.72 | 9.647 to 17.79 | Yes | \*\*\*\* | <0.0001 |
| 7 | 14.64 | 10.57 to 18.71 | Yes | \*\*\*\* | <0.0001 |
| 14 | 10.41 | 6.339 to 14.48 | Yes | \*\*\*\* | <0.0001 |

Sham vs SNI Light/dark test: Locomotor distance of light/dark box

|  |  |  |
| --- | --- | --- |
| Shapiro-Wilk test |  |  |
| W | 0.9542 | 0.9372 |
| P value | 0.6984 | 0.4633 |
| Passed normality test (alpha=0.05)? | Yes | Yes |
| P value summary | ns | ns |
| Unpaired t test |  | |
| P value | 0.1476 | |
| P value summary | ns | |
| Significantly different (P < 0.05)? | No | |
| One- or two-tailed P value? | Two-tailed | |
| t, df | t=1.501, df=22 | |

Sham vs SNI Light/dark test: time spend in light box

|  |  |  |
| --- | --- | --- |
| Shapiro-Wilk test |  |  |
| W | 0.9382 | 0.9507 |
| P value | 0.4754 | 0.6470 |
| Passed normality test (alpha=0.05)? | Yes | Yes |
| P value summary | ns | ns |
| Unpaired t test | |  |
| P value | | <0.0001 |
| P value summary | | \*\*\*\* |
| Significantly different (P < 0.05)? | | Yes |
| One- or two-tailed P value? | | Two-tailed |
| t, df | | t=11.00, df=22 |

Sham vs SNI force swimming: floating duration

|  |  |  |
| --- | --- | --- |
| Shapiro-Wilk test |  |  |
| W | 0.9376 | 0.9268 |
| P value | 0.4674 | 0.3470 |
| Passed normality test (alpha=0.05)? | Yes | Yes |
| P value summary | ns | ns |
| Unpaired t test | |  |
| P value | | <0.0001 |
| P value summary | | \*\*\*\* |
| Significantly different (P < 0.05)? | | Yes |
| One- or two-tailed P value? | | Two-tailed |
| t, df | | t=8.692, df=22 |

Sham vs SNI GFAP positive area

|  |  |  |
| --- | --- | --- |
| Shapiro-Wilk test |  |  |
| W | 0.8951 | 0.9185 |
| P value | 0.3457 | 0.4943 |
| Passed normality test (alpha=0.05)? | Yes | Yes |
| P value summary | ns | ns |
| Unpaired t test |  | |
| P value | <0.0001 | |
| P value summary | \*\*\*\* | |
| Significantly different (P < 0.05)? | Yes | |
| One- or two-tailed P value? | Two-tailed | |
| t, df | t=7.329, df=10 | |

Sham vs SNI glutamate concentration

|  |  |  |
| --- | --- | --- |
| Shapiro-Wilk test |  |  |
| W | 0.8511 | 0.8732 |
| P value | 0.1607 | 0.2391 |
| Passed normality test (alpha=0.05)? | Yes | Yes |
| P value summary | ns | ns |
| Unpaired t test |  | |
| P value | <0.0001 | |
| P value summary | \*\*\*\* | |
| Significantly different (P < 0.05)? | Yes | |
| One- or two-tailed P value? | Two-tailed | |
| t, df | t=6.691, df=10 | |

Sham vs SNI EAAT1 relative O.D vs GADPH

|  |  |  |
| --- | --- | --- |
| Shapiro-Wilk test |  |  |
| W | 0.9872 | 0.9712 |
| P value | 0.9813 | 0.9005 |
| Passed normality test (alpha=0.05)? | Yes | Yes |
| P value summary | ns | ns |
| Unpaired t test |  | |
| P value | 0.6604 | |
| P value summary | ns | |
| Significantly different (P < 0.05)? | No | |
| One- or two-tailed P value? | Two-tailed | |
| t, df | t=0.4528, df=10 | |

Sham vs SNI EAAT2 relative O.D vs GADPH

|  |  |  |
| --- | --- | --- |
| Shapiro-Wilk test |  |  |
| W | 0.8819 | 0.9561 |
| P value | 0.2781 | 0.7889 |
| Passed normality test (alpha=0.05)? | Yes | Yes |
| P value summary | ns | ns |
| Unpaired t test |  | |
| P value | <0.0001 | |
| P value summary | \*\*\*\* | |
| Significantly different (P < 0.05)? | Yes | |
| One- or two-tailed P value? | Two-tailed | |
| t, df | t=8.582, df=10 | |

Comparison of mechanical withdrawal threshold among the 4 groups of mice. (Sham+V, Sham+NaHS, SNI+V, SNI+NaHS)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Two-way ANOVA | Ordinary | |  |  |  | |
| Alpha | 0.05 | |  |  |  | |
|  |  | |  |  |  | |
| Source of Variation | % of total variation | | P value | P value summary | Significant? | |
| Interaction | 10.69 | | <0.0001 | \*\*\*\* | Yes | |
| Row Factor | 14.05 | | <0.0001 | \*\*\*\* | Yes | |
| Column Factor | 50.81 | | <0.0001 | \*\*\*\* | Yes | |
| Tukey's multiple comparisons test | | Mean Diff. | 95.00% CI of diff. | Below threshold? | Summary | Adjusted P Value |
|  | |  |  |  |  |  |
| baseline | |  |  |  |  |  |
| Sham+V vs. Sham+NaHS | | -0.1167 | -0.6251 to 0.3918 | No | ns | 0.9338 |
| Sham+V vs. SNI+V | | 0.1917 | -0.3168 to 0.7001 | No | ns | 0.7633 |
| Sham+V vs. SNI+NaHS | | 0.04167 | -0.4668 to 0.5501 | No | ns | 0.9966 |
| Sham+NaHS vs. SNI+V | | 0.3083 | -0.2001 to 0.8168 | No | ns | 0.3980 |
| Sham+NaHS vs. SNI+NaHS | | 0.1583 | -0.3501 to 0.6668 | No | ns | 0.8515 |
| SNI+V vs. SNI+NaHS | | -0.1500 | -0.6584 to 0.3584 | No | ns | 0.8707 |
|  | |  |  |  |  |  |
| 1 | |  |  |  |  |  |
| Sham+V vs. Sham+NaHS | | 0.2167 | -0.2918 to 0.7251 | No | ns | 0.6880 |
| Sham+V vs. SNI+V | | 1.775 | 1.267 to 2.283 | Yes | \*\*\*\* | <0.0001 |
| Sham+V vs. SNI+NaHS | | 1.650 | 1.142 to 2.158 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+V | | 1.558 | 1.050 to 2.067 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+NaHS | | 1.433 | 0.9249 to 1.942 | Yes | \*\*\*\* | <0.0001 |
| SNI+V vs. SNI+NaHS | | -0.1250 | -0.6334 to 0.3834 | No | ns | 0.9201 |
|  | |  |  |  |  |  |
| 3 | |  |  |  |  |  |
| Sham+V vs. Sham+NaHS | | 0.1333 | -0.3751 to 0.6418 | No | ns | 0.9050 |
| Sham+V vs. SNI+V | | 1.708 | 1.200 to 2.217 | Yes | \*\*\*\* | <0.0001 |
| Sham+V vs. SNI+NaHS | | 1.317 | 0.8082 to 1.825 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+V | | 1.575 | 1.067 to 2.083 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+NaHS | | 1.183 | 0.6749 to 1.692 | Yes | \*\*\*\* | <0.0001 |
| SNI+V vs. SNI+NaHS | | -0.3917 | -0.9001 to 0.1168 | No | ns | 0.1933 |
|  | |  |  |  |  |  |
| 7 | |  |  |  |  |  |
| Sham+V vs. Sham+NaHS | | 0.1750 | -0.3334 to 0.6834 | No | ns | 0.8095 |
| Sham+V vs. SNI+V | | 2.008 | 1.500 to 2.517 | Yes | \*\*\*\* | <0.0001 |
| Sham+V vs. SNI+NaHS | | 1.175 | 0.6666 to 1.683 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+V | | 1.833 | 1.325 to 2.342 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+NaHS | | 1.000 | 0.4916 to 1.508 | Yes | \*\*\*\* | <0.0001 |
| SNI+V vs. SNI+NaHS | | -0.8333 | -1.342 to -0.3249 | Yes | \*\*\* | 0.0002 |
|  | |  |  |  |  |  |
| 14 | |  |  |  |  |  |
| Sham+V vs. Sham+NaHS | | 0.2500 | -0.2584 to 0.7584 | No | ns | 0.5812 |
| Sham+V vs. SNI+V | | 2.225 | 1.717 to 2.733 | Yes | \*\*\*\* | <0.0001 |
| Sham+V vs. SNI+NaHS | | 1.400 | 0.8916 to 1.908 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+V | | 1.975 | 1.467 to 2.483 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+NaHS | | 1.150 | 0.6416 to 1.658 | Yes | \*\*\*\* | <0.0001 |
| SNI+V vs. SNI+NaHS | | -0.8250 | -1.333 to -0.3166 | Yes | \*\*\* | 0.0002 |

Comparison of thermal withdrawal latency among the 4 groups of mice. (Sham+V, Sham+NaHS, SNI+V, SNI+NaHS)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Two-way ANOVA | Ordinary |  |  |  |  |
| Alpha | 0.05 |  |  |  |  |
|  |  |  |  |  |  |
| Source of Variation | % of total variation | P value | P value summary | Significant? |  |
| Interaction | 12.69 | <0.0001 | \*\*\*\* | Yes |  |
| Row Factor | 15.53 | <0.0001 | \*\*\*\* | Yes |  |
| Column Factor | 36.01 | <0.0001 | \*\*\*\* | Yes |  |
|  |  |  |  |  |  |
| ANOVA table | SS | DF | MS | F (DFn, DFd) | P value |
| Interaction | 1910 | 12 | 159.2 | F (12, 220) = 6.503 | P<0.0001 |
| Row Factor | 2337 | 4 | 584.2 | F (4, 220) = 23.87 | P<0.0001 |
| Column Factor | 5420 | 3 | 1807 | F (3, 220) = 73.82 | P<0.0001 |
| Residual | 5384 | 220 | 24.47 |  |  |
| Tukey's multiple comparisons test | Mean Diff. | 95.00% CI of diff. | Below threshold? | Summary | Adjusted P Value |
|  |  |  |  |  |  |
| baseline |  |  |  |  |  |
| Sham+V vs. Sham+NaHS | 3.000 | -2.228 to 8.228 | No | ns | 0.4480 |
| Sham+V vs. SNI+V | 0.5083 | -4.720 to 5.737 | No | ns | 0.9944 |
| Sham+V vs. SNI+NaHS | 0.3750 | -4.853 to 5.603 | No | ns | 0.9977 |
| Sham+NaHS vs. SNI+V | -2.492 | -7.720 to 2.737 | No | ns | 0.6061 |
| Sham+NaHS vs. SNI+NaHS | -2.625 | -7.853 to 2.603 | No | ns | 0.5641 |
| SNI+V vs. SNI+NaHS | -0.1333 | -5.362 to 5.095 | No | ns | 0.9999 |
|  |  |  |  |  |  |
| 1 |  |  |  |  |  |
| Sham+V vs. Sham+NaHS | 2.200 | -3.028 to 7.428 | No | ns | 0.6964 |
| Sham+V vs. SNI+V | 12.43 | 7.197 to 17.65 | Yes | \*\*\*\* | <0.0001 |
| Sham+V vs. SNI+NaHS | 11.84 | 6.613 to 17.07 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+V | 10.23 | 4.997 to 15.45 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+NaHS | 9.642 | 4.413 to 14.87 | Yes | \*\*\*\* | <0.0001 |
| SNI+V vs. SNI+NaHS | -0.5833 | -5.812 to 4.645 | No | ns | 0.9916 |
|  |  |  |  |  |  |
| 3 |  |  |  |  |  |
| Sham+V vs. Sham+NaHS | -0.4083 | -5.637 to 4.820 | No | ns | 0.9971 |
| Sham+V vs. SNI+V | 12.68 | 7.447 to 17.90 | Yes | \*\*\*\* | <0.0001 |
| Sham+V vs. SNI+NaHS | 8.500 | 3.272 to 13.73 | Yes | \*\*\* | 0.0002 |
| Sham+NaHS vs. SNI+V | 13.08 | 7.855 to 18.31 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+NaHS | 8.908 | 3.680 to 14.14 | Yes | \*\*\*\* | <0.0001 |
| SNI+V vs. SNI+NaHS | -4.175 | -9.403 to 1.053 | No | ns | 0.1672 |
|  |  |  |  |  |  |
| 7 |  |  |  |  |  |
| Sham+V vs. Sham+NaHS | -2.150 | -7.378 to 3.078 | No | ns | 0.7114 |
| Sham+V vs. SNI+V | 15.24 | 10.01 to 20.47 | Yes | \*\*\*\* | <0.0001 |
| Sham+V vs. SNI+NaHS | 10.08 | 4.855 to 15.31 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+V | 17.39 | 12.16 to 22.62 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+NaHS | 12.23 | 7.005 to 17.46 | Yes | \*\*\*\* | <0.0001 |
| SNI+V vs. SNI+NaHS | -5.158 | -10.39 to 0.07001 | No | ns | 0.0547 |
|  |  |  |  |  |  |
| 14 |  |  |  |  |  |
| Sham+V vs. Sham+NaHS | -0.3500 | -5.578 to 4.878 | No | ns | 0.9981 |
| Sham+V vs. SNI+V | 14.08 | 8.847 to 19.30 | Yes | \*\*\*\* | <0.0001 |
| Sham+V vs. SNI+NaHS | 9.167 | 3.938 to 14.40 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+V | 14.43 | 9.197 to 19.65 | Yes | \*\*\*\* | <0.0001 |
| Sham+NaHS vs. SNI+NaHS | 9.517 | 4.288 to 14.75 | Yes | \*\*\*\* | <0.0001 |
| SNI+V vs. SNI+NaHS | -4.908 | -10.14 to 0.3200 | No | ns | 0.0744 |

Comparison of the locomotor distance in light/dark test among the 4 groups of mice. (Sham+V, Sham+NaHS, SNI+V, SNI+NaHS)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Shapiro-Wilk test | | |  |  | |  | |  |
| W | | | 0.9513 | 0.9622 | | 0.9712 | | 0.9469 |
| P value | | | 0.6558 | 0.8141 | | 0.9226 | | 0.5929 |
| Passed normality test (alpha=0.05)? | | | Yes | Yes | | Yes | | Yes |
| P value summary | | | ns | ns | | ns | | ns |
| ANOVA summary | | | | | |  | | |
| F | | | | | | 0.1595 | | |
| P value | | | | | | 0.9230 | | |
| P value summary | | | | | | ns | | |
| Significant diff. among means (P < 0.05)? | | | | | | No | | |
| R squared | | | | | | 0.01076 | | |
| Tukey's multiple comparisons test | Mean Diff. | Below threshold? | | | Summary | | Adjusted P Value | | |
| Sham+V vs. Sham+NaHS | 40.73 | No | | | ns | | 0.9800 | | |
| Sham+V vs. SNI+V | 56.02 | No | | | ns | | 0.9507 | | |
| Sham+V vs. SNI+NaHS | 68.23 | No | | | ns | | 0.9155 | | |
| Sham+NaHS vs. SNI+V | 15.28 | No | | | ns | | 0.9989 | | |
| Sham+NaHS vs. SNI+NaHS | 27.50 | No | | | ns | | 0.9937 | | |
| SNI+V vs. SNI+NaHS | 12.22 | No | | | ns | | 0.9994 | | |

Comparison of the time spend in light box among the 4 groups of mice. (Sham+V, Sham+NaHS, SNI+V, SNI+NaHS)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Shapiro-Wilk test | |  | |  | | |  | |  |
| W | | 0.9786 | | 0.9233 | | | 0.9630 | | 0.9229 |
| P value | | 0.9774 | | 0.3145 | | | 0.8252 | | 0.3109 |
| Passed normality test (alpha=0.05)? | | Yes | | Yes | | | Yes | | Yes |
| P value summary | | ns | | ns | | | ns | | ns |
| ANOVA summary | | | | | |  | | | |
| F | | | | | | 25.90 | | | |
| P value | | | | | | <0.0001 | | | |
| P value summary | | | | | | \*\*\*\* | | | |
| Significant diff. among means (P < 0.05)? | | | | | | Yes | | | |
| R squared | | | | | | 0.6385 | | | |
| Tukey's multiple comparisons test | Mean Diff. | | Below threshold? | | Summary | | | Adjusted P Value | | |
| Sham+V vs. Sham+NaHS | 1.375 | | No | | ns | | | 0.9986 | | |
| Sham+V vs. SNI+V | 66.23 | | Yes | | \*\*\*\* | | | <0.0001 | | |
| Sham+V vs. SNI+NaHS | 31.68 | | Yes | | \*\* | | | 0.0037 | | |
| Sham+NaHS vs. SNI+V | 64.86 | | Yes | | \*\*\*\* | | | <0.0001 | | |
| Sham+NaHS vs. SNI+NaHS | 30.30 | | Yes | | \*\* | | | 0.0059 | | |
| SNI+V vs. SNI+NaHS | -34.56 | | Yes | | \*\* | | | 0.0014 | | |

Comparison of the float duration among the 4 groups of mice. (Sham+V, Sham+NaHS, SNI+V, SNI+NaHS)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Shapiro-Wilk test | |  | |  | |  | | |  |
| W | | 0.9445 | | 0.9324 | | 0.9563 | | | 0.9206 |
| P value | | 0.5578 | | 0.4058 | | 0.7293 | | | 0.2906 |
| Passed normality test (alpha=0.05)? | | Yes | | Yes | | Yes | | | Yes |
| P value summary | | ns | | ns | | ns | | | ns |
| ANOVA summary | | | | | | |  | | |
| F | | | | | | | 29.88 | | |
| P value | | | | | | | <0.0001 | | |
| P value summary | | | | | | | \*\*\*\* | | |
| Significant diff. among means (P < 0.05)? | | | | | | | Yes | | |
| R squared | | | | | | | 0.6708 | | |
| Tukey's multiple comparisons test | Mean Diff. | | Below threshold? | | Summary | | | Adjusted P Value | |
| Sham+V vs. Sham+NaHS | -2.458 | | No | | ns | | | 0.9957 | |
| Sham+V vs. SNI+V | -88.88 | | Yes | | \*\*\*\* | | | <0.0001 | |
| Sham+V vs. SNI+NaHS | -39.68 | | Yes | | \*\* | | | 0.0033 | |
| Sham+NaHS vs. SNI+V | -86.43 | | Yes | | \*\*\*\* | | | <0.0001 | |
| Sham+NaHS vs. SNI+NaHS | -37.23 | | Yes | | \*\* | | | 0.0064 | |
| SNI+V vs. SNI+NaHS | 49.20 | | Yes | | \*\*\* | | | 0.0002 | |

Comparison of the neuronal fire rate among the 4 groups of mice. (Sham+V, Sham+NaHS, SNI+V, SNI+NaHS)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Shapiro-Wilk test | |  | |  | |  | | |  |
| W | | 0.8891 | | 0.7898 | | 0.9835 | | | 0.9472 |
| P value | | 0.0107 | | <0.0001 | | 0.9311 | | | 0.1305 |
| Passed normality test (alpha=0.05)? | | No | | No | | Yes | | | Yes |
| P value summary | | \* | | \*\*\*\* | | ns | | | ns |
| Kruskal-Wallis test | | | | | | |  | | |
| P value | | | | | | | <0.0001 | | |
| Exact or approximate P value? | | | | | | | Approximate | | |
| P value summary | | | | | | | \*\*\*\* | | |
| Do the medians vary signif. (P < 0.05)? | | | | | | | Yes | | |
| Number of groups | | | | | | | 4 | | |
| Kruskal-Wallis statistic | | | | | | | 34.00 | | |
| Dunn's multiple comparisons test | Mean rank diff. | | Significant? | | Summary | | | Adjusted P Value | | |
| Sham+V vs. Sham+NaHS | 4.174 | | No | | ns | | | >0.9999 | | |
| Sham+V vs. SNI+V | -42.52 | | Yes | | \*\*\*\* | | | <0.0001 | | |
| Sham+V vs. SNI+NaHS | -18.75 | | No | | ns | | | 0.2282 | | |
| Sham+NaHS vs. SNI+V | -46.69 | | Yes | | \*\*\*\* | | | <0.0001 | | |
| Sham+NaHS vs. SNI+NaHS | -22.93 | | Yes | | \* | | | 0.0385 | | |
| SNI+V vs. SNI+NaHS | 23.76 | | Yes | | \* | | | 0.0436 | | |

Comparison of the EAAT2 relative O.D vs GADPH among the 4 groups of mice. (Sham+V, Sham+NaHS, SNI+V, SNI+NaHS)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Shapiro-Wilk test | |  | |  | | |  | |  |
| W | | 0.8983 | | 0.8267 | | | 0.9217 | | 0.9091 |
| P value | | 0.3641 | | 0.1007 | | | 0.5175 | | 0.4304 |
| Passed normality test (alpha=0.05)? | | Yes | | Yes | | | Yes | | Yes |
| P value summary | | ns | | ns | | | ns | | ns |
| ANOVA summary | | | | | |  | | | |
| F | | | | | | 33.56 | | | |
| P value | | | | | | <0.0001 | | | |
| P value summary | | | | | | \*\*\*\* | | | |
| Significant diff. among means (P < 0.05)? | | | | | | Yes | | | |
| R squared | | | | | | 0.8343 | | | |
| Tukey's multiple comparisons test | Mean Diff. | | Below threshold? | | Summary | | | Adjusted P Value | | |
| Sham+V vs. Sham+NaHS | 0.006667 | | No | | ns | | | >0.9999 | | |
| Sham+V vs. SNI+V | 1.163 | | Yes | | \*\*\*\* | | | <0.0001 | | |
| Sham+V vs. SNI+NaHS | 0.6817 | | Yes | | \*\*\* | | | 0.0004 | | |
| Sham+NaHS vs. SNI+V | 1.157 | | Yes | | \*\*\*\* | | | <0.0001 | | |
| Sham+NaHS vs. SNI+NaHS | 0.6750 | | Yes | | \*\*\* | | | 0.0005 | | |
| SNI+V vs. SNI+NaHS | -0.4817 | | Yes | | \* | | | 0.0115 | | |

Comparison of the glutamate concentration among the 4 groups of mice. (Sham+V, Sham+NaHS, SNI+V, SNI+NaHS)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Shapiro-Wilk test | |  | |  | |  | | |  |
| W | | 0.9285 | | 0.9113 | | 0.9649 | | | 0.9735 |
| P value | | 0.5682 | | 0.4448 | | 0.8565 | | | 0.9149 |
| Passed normality test (alpha=0.05)? | | Yes | | Yes | | Yes | | | Yes |
| P value summary | | ns | | ns | | ns | | | ns |
| ANOVA summary | | | | | | |  | | |
| F | | | | | | | 37.18 | | |
| P value | | | | | | | <0.0001 | | |
| P value summary | | | | | | | \*\*\*\* | | |
| Significant diff. among means (P < 0.05)? | | | | | | | Yes | | |
| R squared | | | | | | | 0.8480 | | |
| Tukey's multiple comparisons test | Mean Diff. | | Below threshold? | | Summary | | | Adjusted P Value | | |
| Sham+V vs. Sham+NaHS | 1.588 | | No | | ns | | | 0.9513 | | |
| Sham+V vs. SNI+V | -26.26 | | Yes | | \*\*\*\* | | | <0.0001 | | |
| Sham+V vs. SNI+NaHS | -3.632 | | No | | ns | | | 0.6297 | | |
| Sham+NaHS vs. SNI+V | -27.85 | | Yes | | \*\*\*\* | | | <0.0001 | | |
| Sham+NaHS vs. SNI+NaHS | -5.220 | | No | | ns | | | 0.3327 | | |
| SNI+V vs. SNI+NaHS | 22.63 | | Yes | | \*\*\*\* | | | <0.0001 | | |

Comparison of the GFAP positive area among the 4 groups of mice. (Sham+V, Sham+NaHS, SNI+V, SNI+NaHS)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Shapiro-Wilk test | |  | |  | | |  | |  |
| W | | 0.9622 | | 0.9767 | | | 0.8411 | | 0.9715 |
| P value | | 0.8364 | | 0.9343 | | | 0.1332 | | 0.9025 |
| Passed normality test (alpha=0.05)? | | Yes | | Yes | | | Yes | | Yes |
| P value summary | | ns | | ns | | | ns | | ns |
| ANOVA summary | | | | | |  | | | |
| F | | | | | | 21.13 | | | |
| P value | | | | | | <0.0001 | | | |
| P value summary | | | | | | \*\*\*\* | | | |
| Significant diff. among means (P < 0.05)? | | | | | | Yes | | | |
| R squared | | | | | | 0.7602 | | | |
| Tukey's multiple comparisons test | Mean Diff. | | Below threshold? | | Summary | | | Adjusted P Value | | |
| Sham+V vs. Sham+NaHS | -392.8 | | No | | ns | | | 0.9851 | | |
| Sham+V vs. SNI+V | -7967 | | Yes | | \*\*\*\* | | | <0.0001 | | |
| Sham+V vs. SNI+NaHS | -2839 | | No | | ns | | | 0.0876 | | |
| Sham+NaHS vs. SNI+V | -7574 | | Yes | | \*\*\*\* | | | <0.0001 | | |
| Sham+NaHS vs. SNI+NaHS | -2447 | | No | | ns | | | 0.1662 | | |
| SNI+V vs. SNI+NaHS | 5128 | | Yes | | \*\* | | | 0.0010 | | |