**Supplemental Digital Content**

**Table 1.** Assumption Checking for Statistical Models at Figure 2

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Variable | Statistical Group | n | Normality test(p-value) | Equal variance test(p-value) | Analysis |
| Figure 2A | PWT | Intra group | SNL+Sal | 33 | 0.491 | 0.553 | One-Way RM Anova |
| SNL+Mil (1ug) | 40 | 0.176 | 0.895 | One-Way RM Anova |
| SNL+Mil (5ug) | 45 | 0.507 | 0.115 | One-Way RM Anova |
| SNL+Mil (20ug) | 42 | 0.648 | 0.982 | One-Way RM Anova |
| Inter group | 0H | 33 | 0.793 | 0.102 | One-Way Anova |
| 1H | 33 | 0.574 | 0.381 | One-Way Anova |
| 2H | 33 | 0.780 | 0.227 | One-Way Anova |
| 4H | 33 | 0.030 | 0.655 | Kruskal-Wallis Test |
| 6H | 28 | 0.717 | 0.625 | One-Way Anova |
| Figure 2B | PWL | Intra group | SNL+Sal | 33 | 0.418 | 0.464 | One-Way RM Anova |
| SNL+Mil (1ug) | 29 | 0.100 | 0.465 | One-Way RM Anova |
| SNL+Mil (5ug) | 30 | 0.000 | 0.441 | Friedman Test |
| SNL+Mil (20ug) | 32 | 0.758 | 0.921 | One-Way RM Anova |
| Inter group | 0H | 26 | 0.528 | 0.813 | One-Way Anova |
| 1H | 26 | 0.003 | 0.321 | Kruskal-Wallis Test |
| 2H | 26 | 0.637 | 0.674 | One-Way Anova |
| 4H | 26 | 0.622 | 0.045 | Kruskal-Wallis Test |
| 6H | 20 | 0.422 | 0.148 | One-Way Anova |
| PWT, Hind paw withdrawal threshold; PWL, Hind paw withdrawal latency.P-value were calculated from Shapiro-Wilks test, Levene Median test. |

**Table 2.** Assumption Checking for Statistical Models at Figure 3

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Variable | Statistical Group | n | Normality test(p-value) | Equal variance test(p-value) | Analysis |
| Figure 3A | PWT | Intra group | SNL+EA+Mil | 42 | 0.337 | 0.999 | One-Way RM Anova |
| SNL+EA+Sal | 46 | 0.670 | 0.341 | One-Way RM Anova |
| Inter group | 0H | 40 | 0.243 | 0.024 | Kruskal-Wallis Test |
| 1H | 40 | 0.661 | 0.229 | One-Way Anova |
| 2H | 40 | 0.502 | 0.209 | One-Way Anova |
| 4H | 40 | 0.014 | 0.115 | Kruskal-Wallis Test |
| 6H | 35 | 0.019 | 0.140 | Kruskal-Wallis Test |
| 8H | 29 | 0.491 | 0.672 | One-Way Anova |
| Figure 3B | PWL | Intra group | SNL+EA+Mil | 30 | 0.808 | 0.121 | One-Way RM Anova |
| SNL+EA+Sal | 34 | 0.485 | 0.920 | One-Way RM Anova |
| Inter group | 0H | 31 | 0.616 | 0.777 | One-Way Anova |
| 1H | 31 | 0.002 | 0.054 | Kruskal-Wallis Test |
| 2H | 31 | 0.309 | 0.097 | One-Way Anova |
| 4H | 31 | 0.425 | 0.069 | One-Way Anova |
| 6H | 26 | 0.434 | 0.629 | One-Way Anova |
| 8H | 20 | 0.314 | 0.834 | One-Way Anova |
| PWT*,* Hind paw withdrawal threshold; PWL*,* Hind paw withdrawal latency.P-value were calculated from Shapiro-Wilks test, Levene Median test. |

**Table 3.** Assumption Checking for Statistical Models at Figure 5

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Variable | Statistical Group | n | Normality test(p-value) | Equal variance test(p-value) | Analysis |
| Figure 5A | PWT | Intragroup | 6-OHDA+SNL+Sal | 42 | 0.201 | 0.487 | One-Way RM Anova |
| 6-OHDA+SNL+EA+Mil | 60 | 0.706 | 0.857 | One-Way RM Anova |
| Ascorbic acid+SNL+EA+Mil | 54 | 0.237 | 0.137 | One-Way RM Anova |
| 6-OHDA+SNL+Sal | 14 | 0.049 |  | Wilcoxon Signed Rank |
| 6-OHDA+SNL+EA+Mil | 16 | 0.659 |  | Paired t-test |
| Ascorbic acid+SNL+EA+Mil | 18 | 0.010 |  | Wilcoxon Signed Rank |
| Intergroup | pre | 26 | 0.061 | 0.474 | One-Way Anova |
| Post-6OHDA | 22 | 0.003 | 0.555 | Kruskal-Wallis Test |
| 0H | 26 | 0.275 | 0.091 | One-Way Anova |
| 1H | 26 | 0.821 | 0.001 | Kruskal-Wallis Test |
| 2H | 26 | 0.491 | 0.330 | One-Way Anova |
| 4H | 26 | 0.589 | 0.740 | One-Way Anova |
| 6H | 26 | 0.106 | 0.126 | One-Way Anova |
| 8H | 26 | 0.527 | 0.075 | One-Way Anova |
| Figure 5B | PWL | Intragroup | 6-OHDA+SNL+Sal | 30 | 0.642 | 0.062 | One-Way RM Anova |
| 6-OHDA+SNL+EA+Mil | 54 | 0.181 | 0.318 | One-Way RM Anova |
| Ascorbic acid+SNL+EA+Mil | 54 | 0.314 | 0.981 | One-Way RM Anova |
| 6-OHDA+SNL+Sal | 10 | 0.910 |  | Paired t-test |
| 6-OHDA+SNL+EA+Mil | 18 | 0.830 |  | Paired t-test |
| Ascorbic acid+SNL+EA+Mil | 18 | 0.124 |  | Paired t-test |
| Intergroup | pre | 23 | 0.048 | 0.977 | Kruskal-Wallis Test |
| Post-6OHDA | 23 | 0.146 | 0.895 | One-Way Anova |
| 0H | 23 | 0.148 | 0.430 | One-Way Anova |
| 1H | 23 | 0.106 | 0.003 | Kruskal-Wallis Test |
| 2H | 23 | 0.043 | 0.048 | Kruskal-Wallis Test |
| 4H | 23 | 0.788 | 0.003 | Kruskal-Wallis Test |
| 6H | 23 | 0.907 | 0.120 | One-Way Anova |
| 8H | 23 | 0.271 | 0.536 | One-Way Anova |
| PWT*,* Hind paw withdrawal threshold; PWL*,* Hind paw withdrawal latency.P-value were calculated from Shapiro-Wilks test, Levene Median test. |

**Table 4.** Assumption Checking for Statistical Models at Figure 6

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Variable | Statistical Group | n | Normality test(p-value) | Equal variance test(p-value) | Analysis |
| Figure 6A | PWT | Intragroup | SNL+Yoh | 24 | 0.708 | 0.731 | One-Way RM Anova |
| SNL+EA+Mil | 42 | 0.337 | 0.999 | One-Way RM Anova |
| SNL+Yoh+EA+Mil | 54 | 0.899 | 0.033 | Friedman Test |
| Intergroup | 0H | 20 | 0.484 | 0.946 | One-Way Anova |
| 1H | 20 | 0.620 | 0.568 | One-Way Anova |
| 2H | 20 | 0.029 | 0.578 | Kruskal-Wallis Test |
| 4H | 20 | 0.510 | 0.501 | One-Way Anova |
| 6H | 20 | 0.501 | 0.527 | One-Way Anova  |
| 8H | 20 | 0.919 | 0.552 | One-Way Anova |
| Figure 6B | PWT | Intragroup | SNL+Yoh | 30 | 0.153 | 0.338 | One-Way RM Anova |
| SNL+EA+Mil | 30 | 0.808 | 0.121 | One-Way RM Anova |
| SNL+Yoh+EA+Mil | 48 | 0.228 | 0.246 | One-Way RM Anova |
| Intergroup | 0H | 18 | 0.372 | 0.151 | One-Way Anova |
| 1H | 18 | 0.823 | 0.263 | One-Way Anova |
| 2H | 18 | 0.413 | 0.015 | Kruskal-Wallis Test |
| 4H | 18 | 0.309 | 0.059 | One-Way Anova |
| 6H | 18 | 0.733 | 0.489 | One-Way Anova  |
| 8H | 18 | 0.369 | 0.982 | One-Way Anova |
| PWT, Hind paw withdrawal threshold; PWL, Hind paw withdrawal latency.P-value were calculated from Shapiro-Wilks test, Levene Median test. |