

|  | Male            |                |                 |                | Female          |                |                |                |
|--|-----------------|----------------|-----------------|----------------|-----------------|----------------|----------------|----------------|
|  | Saline          |                | LPS             |                | Saline          |                | LPS            |                |
|  | Adult           | Aged           | Adult           | Aged           | Adult           | Aged           | Adult          | Aged           |
| DG                                     |                 |                |                 |                |                 |                |                |                |
| Cell Count (#/ROI)                     | 150.75 ± 11.65  | 220 ± 16.643   | 175 ± 9.99      | 170.5 ± 19.00  | 147.33 ± 22.92  | 192 ± 18.15    | 145.25 ± 26.24 | 199 ± 10.75    |
| IBA1+ Volume (x10 <sup>6</sup> voxels) | 0.175 ± 0.077   | 0.214 ± 0.069  | 0.254 ± 0.017   | 0.351 ± 0.07   | 0.292 ± 0.058   | 0.265 ± 0.045  | 0.214 ± 0.034  | 0.251 ± 0.036  |
| Soma Volume (μm <sup>3</sup> )         | 645.52 ± 109.53 | 629.91 ± 67.47 | 637.78 ± 61.51  | 652.91 ± 88.36 | 486.07 ± 88.71  | 527.98 ± 69.68 | 591.55 ± 86.86 | 509.84 ± 71.17 |
| CA1                                    |                 |                |                 |                |                 |                |                |                |
| Cell Count (#/ROI)                     | 169 ± 31.43     | 176.33 ± 49.24 | 145 ± 21.74     | 199 ± 29.97    | 215 ± 25.23     | 190.33 ± 17.50 | 177 ± 25.34    | 176 ± 36.71    |
| IBA1+ Volume (x10 <sup>6</sup> voxels) | 0.173 ± 0.061   | 0.248 ± 0.039  | 0.285 ± 0.063   | 0.373 ± 0.086  | 0.368 ± 0.075   | 0.281 ± 0.038  | 0.25 ± 0.051   | 0.267 ± 0.046  |
| Soma Volume (μm <sup>3</sup> )         | 549.75 ± 95.31  | 556.28 ± 86.66 | 632.86 ± 155.32 | 560.4 ± 103.49 | 463 ± 97.41     | 509.35 ± 98.90 | 528.26 ± 52.60 | 432.21 ± 18.33 |
| CA3                                    |                 |                |                 |                |                 |                |                |                |
| Cell Count (#/ROI)                     | 148.67 ± 13.58  | 236.33 ± 29.77 | 166.25 ± 31.83  | 224.25 ± 31.22 | 162.25 ± 39.95  | 196.33 ± 18.88 | 181.25 ± 35.72 | 208.25 ± 13.2  |
| IBA1+ Volume (x10 <sup>6</sup> voxels) | 0.213 ± 0.066   | 0.231 ± 0.043  | 0.248 ± 0.03    | 0.39 ± 0.147   | 0.28 ± 0.044    | 0.326 ± 0.072  | 0.257 ± 0.033  | 0.278 ± 0.084  |
| Soma Volume (μm <sup>3</sup> )         | 559.50 ± 67.29  | 608.23 ± 30.25 | 601.87 ± 158.87 | 588.75 ± 78.56 | 424.43 ± 108.29 | 491.24 ± 37.40 | 578.85 ± 60.79 | 455.40 ± 61.56 |