**Rowe R.K., Green, T.R.F., Murphy S.M., Ortiz, J.B. (2021) Data from: Aging with brain injury: Age at injury influences the glial response to traumatic brain injury in juveniles.**

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**File List**

Gliosis\_Data.csv

Cell\_Body\_Data.csv

**File Descriptions**

Gliosis\_Data.csv: File containing all data from microglia and astrocytes.

1. Animal – Unique identifier for individual mice.
2. Litter – Categorical variable denoting the litter that each mouse was sourced from.
3. Surgery.Day – Categorical variable denoting the day of the study that surgery occurred.
4. Treatment – Categorical variable denoting whether each mouse received a traumatic brain injury (TBI) via midline fluid percussion or not (Sham).
5. TPI – Categorical variable denoting the time post-injury, where 1TPI = 2 hours, 2TPI = 1 day, 3TPI = 7 days, 4TPI = 25 days, and 5TPI = 43 days.
6. Injury.Age – Categorical variable denoting the injury age group of each mouse.
7. Death.Age – Categorical variable denoting the terminal age group of each mouse.
8. Seizure – Categorical variable denoting whether each mouse exhibited seizure-like behavior immediately following TBI.
9. Apnea – Categorical variable denoting whether each mouse exhibited apnea immediately following TBI.
10. GFAP.peri.cellcover – Integer variable of GFAP cellcover (n) in the peri-injury cortex.
11. GFAP.peri.cover – Percentage variable of GFAP pixel coverage (%) in the peri-injury cortex.
12. GFAP.peri.cells – Integer variable of GFAP cells (n) in the peri-injury cortex.
13. GFAP.S1BF.cellcover – Integer variable of GFAP cellcover (n) in the S1BF cortex.
14. GFAP.S1BF.cover – Percentage variable of GFAP pixel coverage (%) in the S1BF cortex.
15. GFAP.S1BF.cells – Integer variable of GFAP cells (n) in the S1BF cortex.
16. GFAP.remote.cellcover – Integer variable of GFAP cellcover (n) in the perirhinal cortex.
17. GFAP.remote.cover – Percentage variable of GFAP pixel coverage (%) in the perirhinal cortex.
18. GFAP.remote.cells – Integer variable of GFAP cells (n) in the perirhinal cortex.
19. IBA1.peri.cells – Integer variable of IBA1 cells (n) in the peri-injury cortex.
20. IBA1.peri.branches – Integer variable of IBA1 microglia branch lengths (μm) in the peri-injury cortex.
21. IBA1.peri.ends – Integer variable of IBA1 microglia end points (n) in the peri-injury cortex.
22. IBA1.S1BF.cells – Integer variable of IBA1 cells (n) in the S1BF cortex.
23. IBA1.S1BF.branches – Integer variable of IBA1 microglia branch lengths (μm) in the S1BF cortex.
24. IBA1.S1BF.ends – Integer variable of IBA1 microglia end points (n) in the S1BF cortex.
25. IBA1.remote.cells – Integer variable of IBA1 cells (n) in the perirhinal cortex.
26. IBA1.remote.branches – Integer variable of IBA1 microglia branch lengths (μm) in the perirhinal cortex.
27. IBA1.remote.ends – Integer variable of IBA1 microglia end points (n) in the perirhinal cortex.

Cell\_Body\_Data.csv: File containing all data for cell body perimeters and areas.

1. Animal – Unique identifier for individual mice.
2. Litter – Categorical variable denoting the litter that each mouse was sourced from.
3. Surgery.Day – Categorical variable denoting the day of the study that surgery occurred.
4. Treatment – Categorical variable denoting whether each mouse received a traumatic brain injury (TBI) via midline fluid percussion or not (Sham).
5. TPI – Categorical variable denoting the time post-injury, where 1TPI = 2 hours, 2TPI = 1 day, 3TPI = 7 days, 4TPI = 25 days, and 5TPI = 43 days.
6. Injury.Age – Categorical variable denoting the injury age group of each mouse.
7. Death.Age – Categorical variable denoting the terminal age group of each mouse.
8. Slide – Categorical variable denoting the slide number.
9. Cell1\_Upper\_Area – Area (μm2) of randomly selected cell #1 in the peri-injury cortex.
10. Cell2\_Upper\_Area – Area (μm2) of randomly selected cell #2 in the peri-injury cortex.
11. Cell3\_Upper\_Area – Area (μm2) of randomly selected cell #3 in the peri-injury cortex.
12. Cell4\_Upper\_Area – Area (μm2) of randomly selected cell #4 in the peri-injury cortex.
13. Cell5\_Upper\_Area – Area (μm2) of randomly selected cell #5 in the peri-injury cortex.
14. Cell1\_S1BF\_Area – Area (μm2) of randomly selected cell #1 in the S1BF cortex.
15. Cell2\_S1BF\_Area – Area (μm2) of randomly selected cell #2 in the S1BF cortex.
16. Cell3\_S1BF\_Area – Area (μm2) of randomly selected cell #3 in the S1BF cortex.
17. Cell4\_S1BF\_Area – Area (μm2) of randomly selected cell #4 in the S1BF cortex.
18. Cell5\_S1BF\_Area – Area (μm2) of randomly selected cell #5 in the S1BF cortex.
19. Cell1\_Low\_Area – Area (μm2) of randomly selected cell #1 in the perirhinal cortex.
20. Cell2\_Low\_Area – Area (μm2) of randomly selected cell #2 in the perirhinal cortex.
21. Cell3\_Low\_Area – Area (μm2) of randomly selected cell #3 in the perirhinal cortex.
22. Cell4\_Low\_Area – Area (μm2) of randomly selected cell #4 in the perirhinal cortex.
23. Cell5\_Low\_Area – Area (μm2) of randomly selected cell #5 in the perirhinal cortex.
24. Cell1\_Upper\_Perim – Perimeter (μm) of randomly selected cell #1 in the peri-injury cortex.
25. Cell2\_Upper\_Perim – Perimeter (μm) of randomly selected cell #2 in the peri-injury cortex.
26. Cell3\_Upper\_Perim – Perimeter (μm) of randomly selected cell #3 in the peri-injury cortex.
27. Cell4\_Upper\_Perim – Perimeter (μm) of randomly selected cell #4 in the peri-injury cortex.
28. Cell5\_Upper\_Perim – Perimeter (μm) of randomly selected cell #5 in the peri-injury cortex.
29. Cell1\_S1BF\_Perim – Perimeter (μm) of randomly selected cell #1 in the S1BF cortex.
30. Cell2\_S1BF\_Perim – Perimeter (μm) of randomly selected cell #2 in the S1BF cortex.
31. Cell3\_S1BF\_Perim – Perimeter (μm) of randomly selected cell #3 in the S1BF cortex.
32. Cell4\_S1BF\_Perim – Perimeter (μm) of randomly selected cell #4 in the S1BF cortex.
33. Cell5\_S1BF\_Perim – Perimeter (μm) of randomly selected cell #5 in the S1BF cortex.
34. Cell1\_Low\_Perim – Perimeter (μm) of randomly selected cell #1 in the perirhinal cortex.
35. Cell2\_Low\_Perim – Perimeter (μm) of randomly selected cell #2 in the perirhinal cortex.
36. Cell3\_Low\_Perim – Perimeter (μm) of randomly selected cell #3 in the perirhinal cortex.
37. Cell4\_Low\_Perim – Perimeter (μm) of randomly selected cell #4 in the perirhinal cortex.
38. Cell5\_Low\_Perim – Perimeter (μm) of randomly selected cell #5 in the perirhinal cortex.