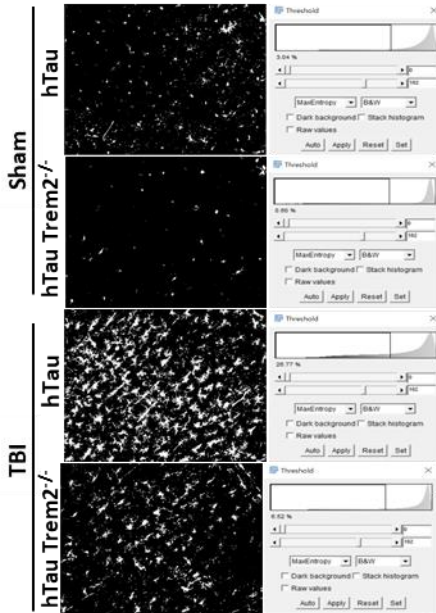
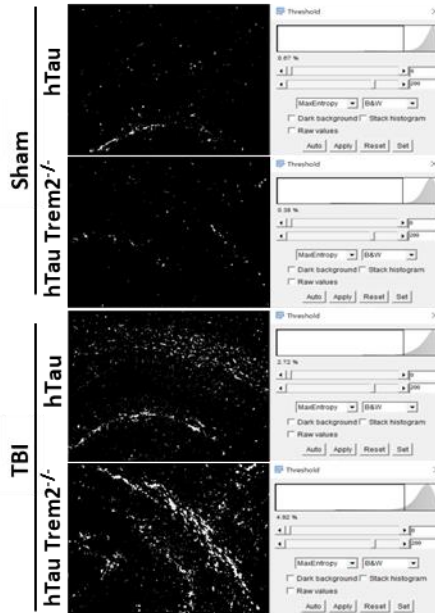


Supplementary Figures

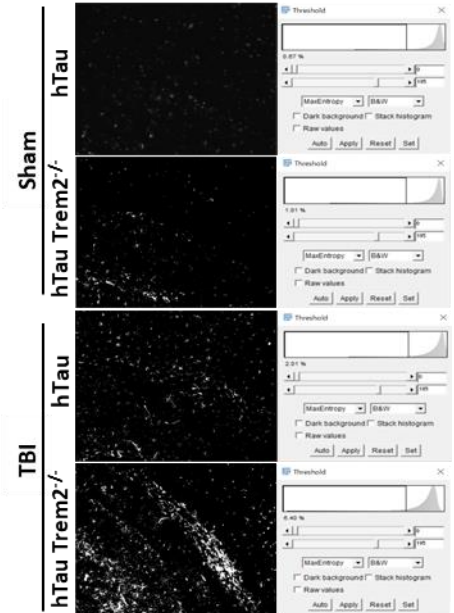
A. Fig. 1 F4/80



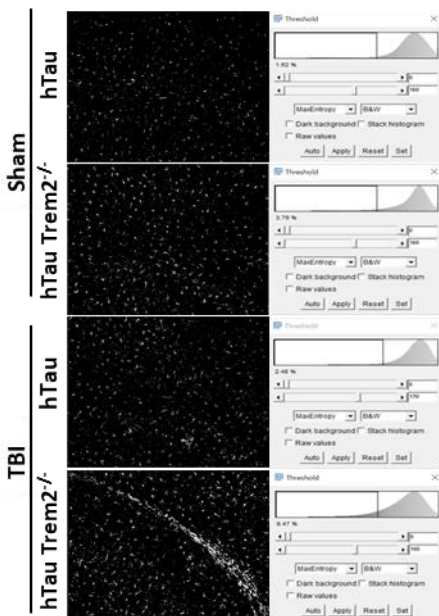
B. Fig. 2 CD45



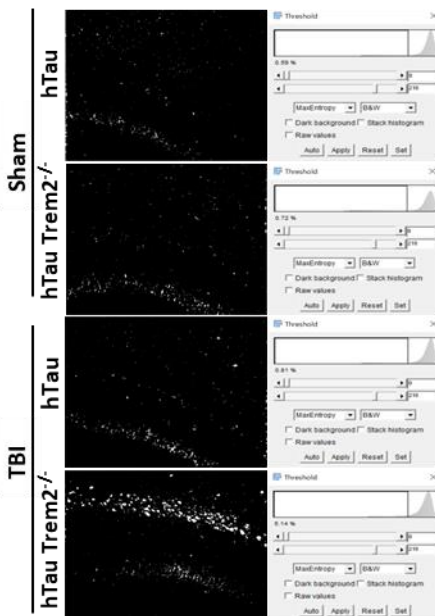
C. Fig. 2 F4/80



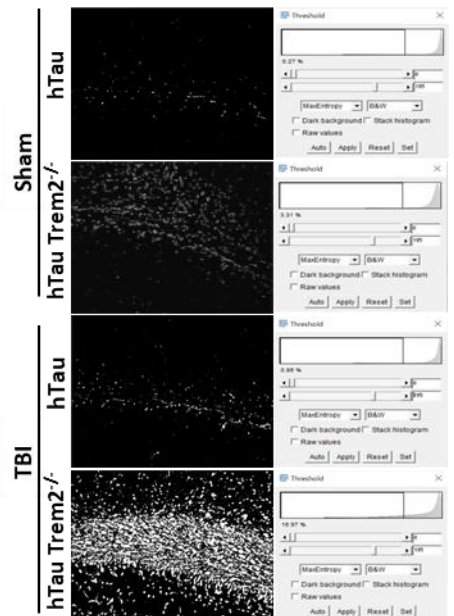
D. Fig. 2 Iba-1



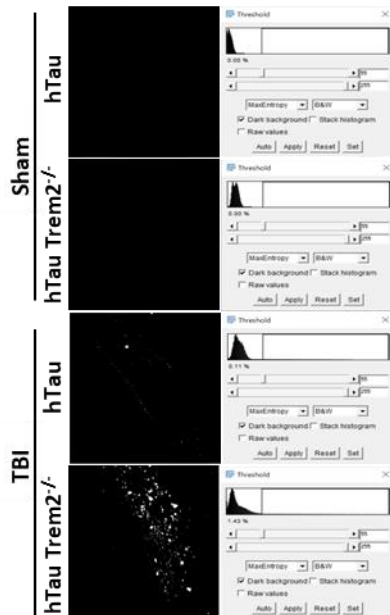
E. Fig. 3 APP



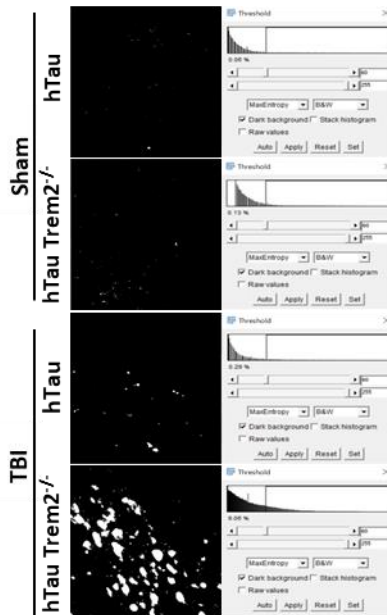
F. Fig. 4 Gallyas silver



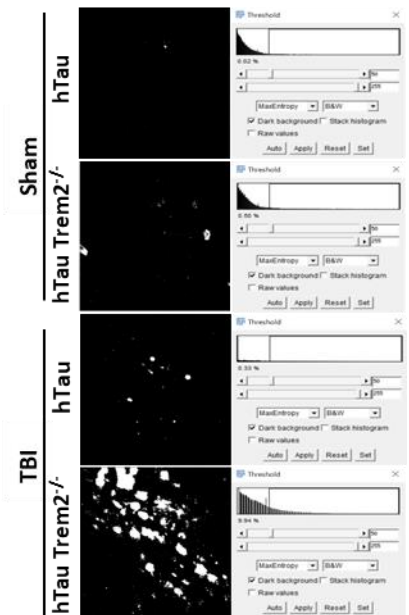
G. Fig. 5 FluoroJade-C



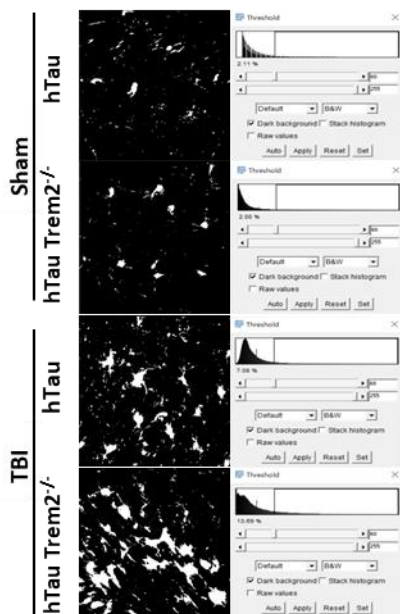
H. Fig. 5 Lamp-1



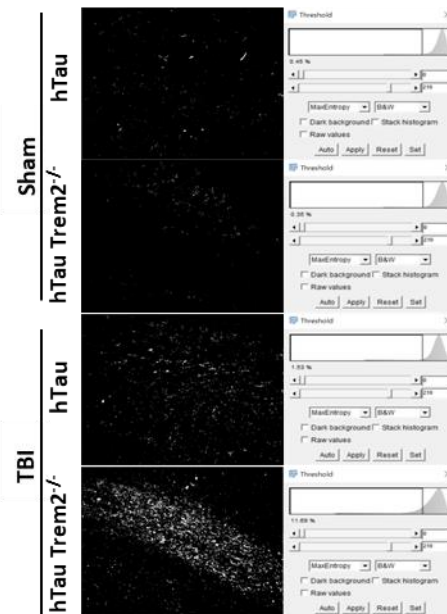
I. Fig. 5 Ubiquitin



J. Fig. 6 Iba-1

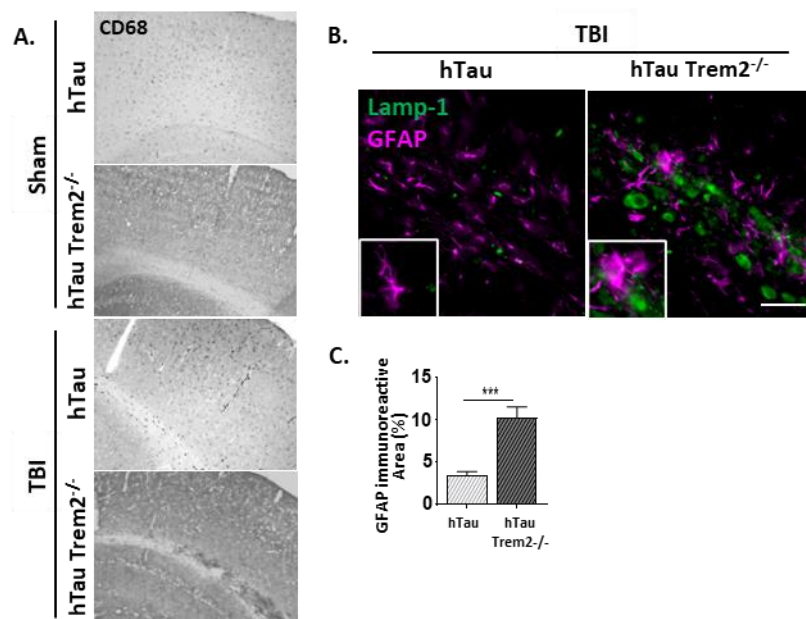


K. Fig. 7 IgG



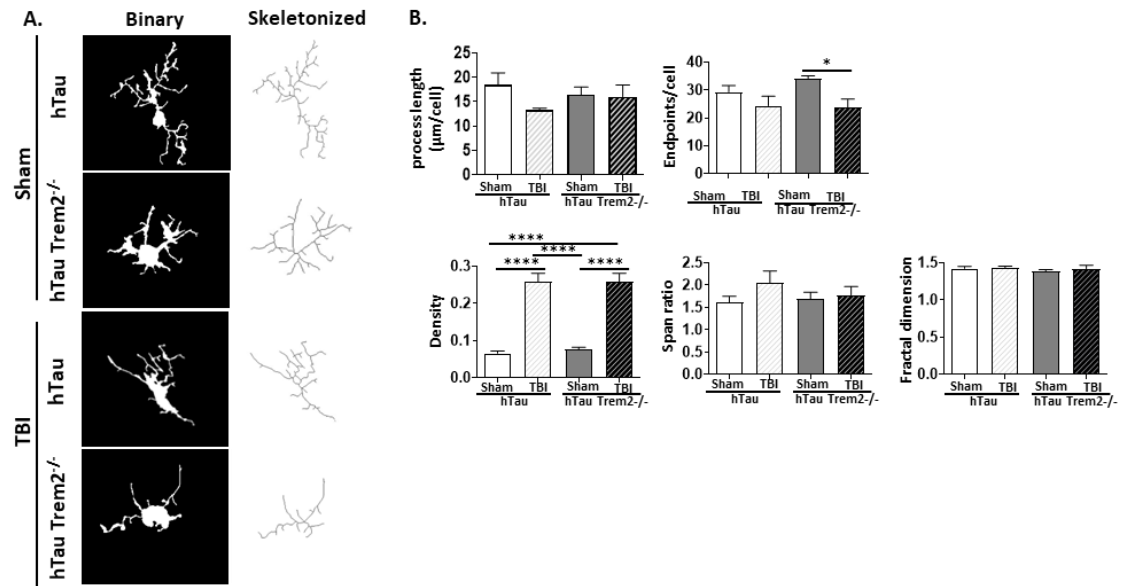
Supplementary Figure 1.

(A-K) The threshold used for the quantification of each immunoreactivity. Representative images of the pixel intensity histograms are shown.



Supplementary Figure 2.

Htau;Trem2^{-/-} TBI mice showed enhanced Iba1, CD45, and F4/80 in the white matter tract near the lesion at 120 DPI. Representative CD68 (A) and GFAP (B) staining intensity in TBI of hTau and hTauTrem2^{-/-} mice in the white matter tract near lesion site. (C) Quantification of percent area covered by GFAP. n=5 mice per group. Error bars indicate SEM; ***p<0.0005. Scale bar 50μm.



Supplementary Figure 3.

Microglia/macrophage morphological changes in hTau TBI mice and hTau;*Trem2*^{-/-} TBI mice. (A) Representative binary and skeletonized images of microglia/macrophages in the white matter tract near the lesion from each group. Randomly selected Iba-1⁺ cells (20/group) were isolated, thresholded, and skeletonized. (B) Quantitative analysis of ramification (process length and endpoint), cell size (density), cell shape (span ratio), and cell complexity (fractal dimension). n=6 mice per group. Error bars indicate SEM; **p* < 0.05, *****p* < 0.0001.