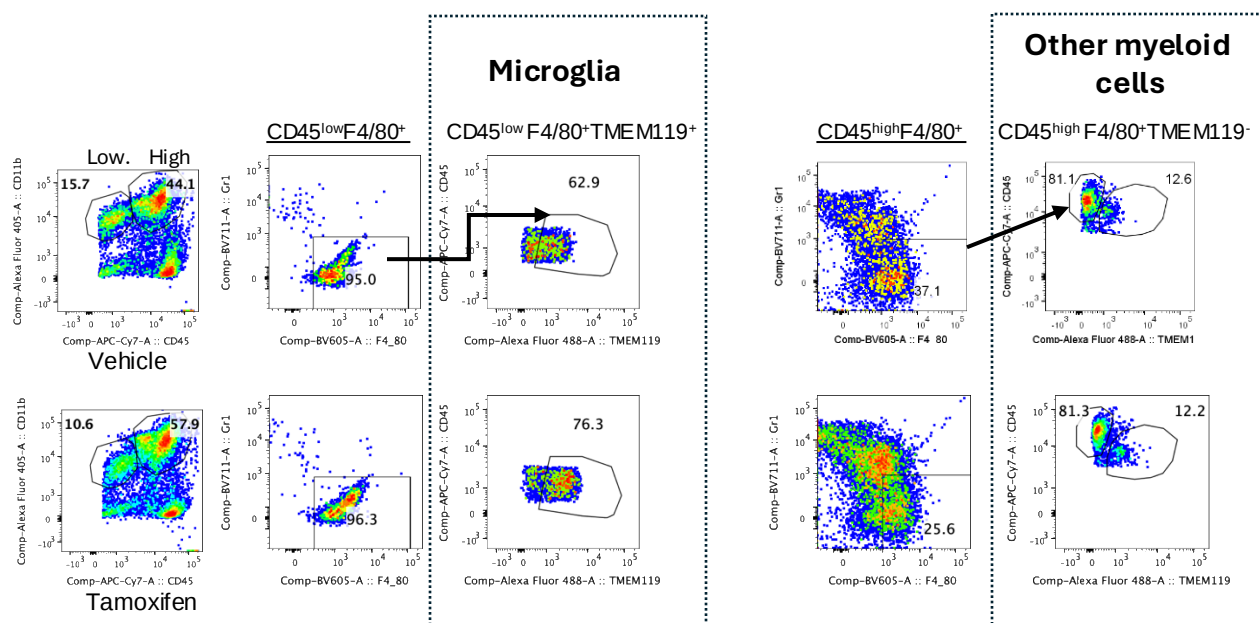
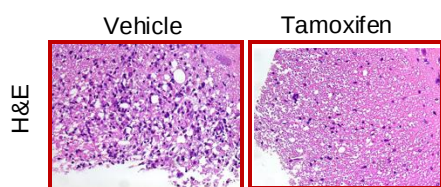


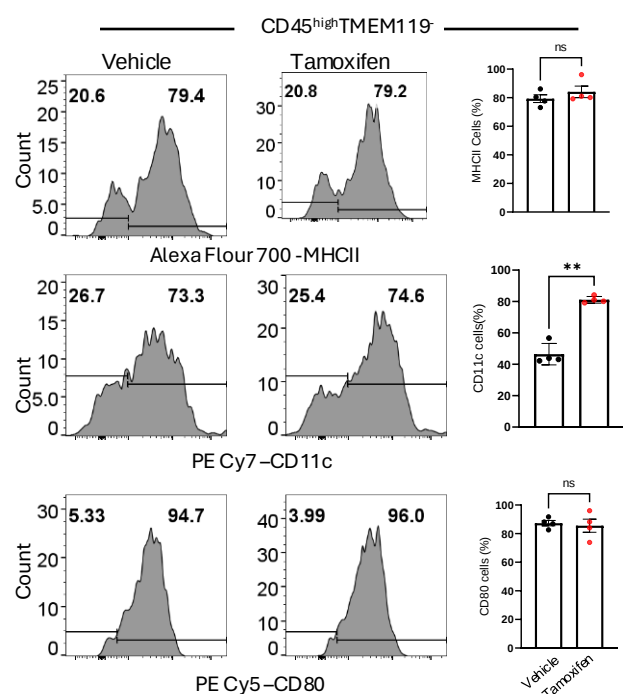
A Microglia gating



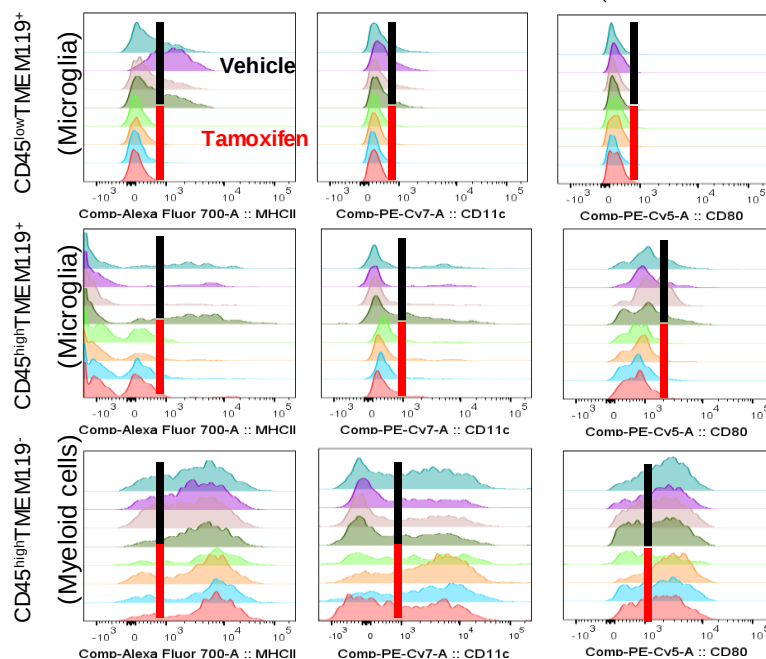
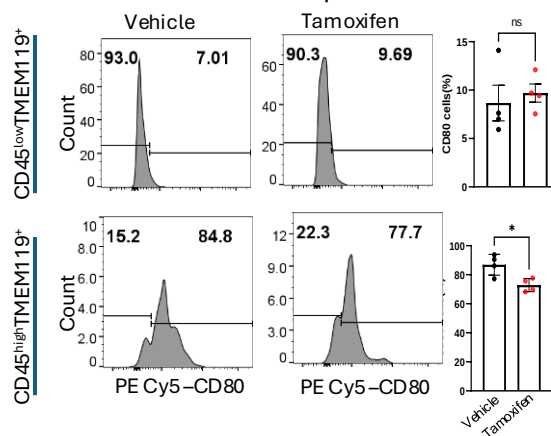
B Increased cellularity in WT spinal cord section



D Activation markers in other CNS myeloid cells



C Reduced Cd80 expression



Supplemental Figure 1 Gating strategy for ex-vivo analysis of microglia. (A) representative strategy for flow cytometry analysis and microglia sorting for RNA-seq. (B) Histological section of spinal cord stained with H&E. Influx of invading cells were detected in WT section shown as black dots, reduced in Brd4cKO section. (C) Flow cytometry plots and quantification of CD80 co stimulatory molecule showing elevated CD80 expression in CD45^{high}CD11b⁺TMEM119⁺ WT microglia but not in Brd4cKO microglia. (D) (Left) Flow cytometry quantification of MHCII, CD11c, CD80 from CD45^{high}CD11b⁺TMEM119⁻ myeloid cells. (Right) Flow cytometry quantification of MHCII, CD11c, CD80 from CD45^{low/high}CD11b⁺TMEM119⁺ microglia and CD45^{high}CD11b⁺TMEM119⁻ myeloid cells from CNS.