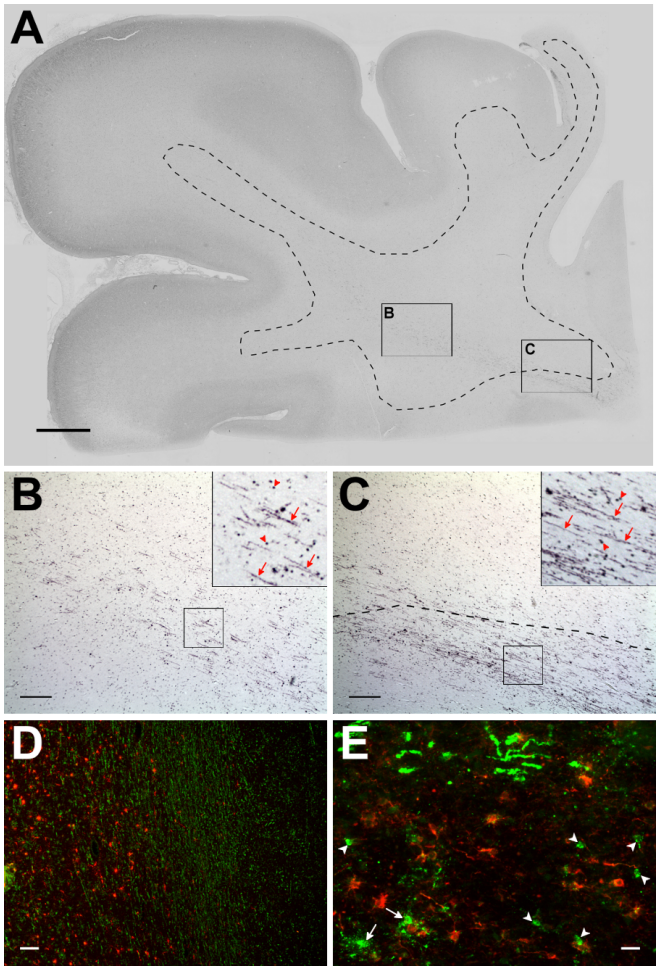

Supplemental Figure 6. Myelination was typically low in WMI cases in regions of diffuse astrogliosis. (A) Representative low power montage of tissue sections double-stained for Olig2 and MBP staining for myelin, from a WMI case from the retrospective cohort at 38 weeks PCA. Superimposed on the image are the approximate boundaries of diffuse astrogliosis initially defined by H & E staining and confirmed by quantification of astrogliosis. (B) Details of MBP staining from inset in A. Sparse myelination (purple, linear structures; red arrows) was seen within the region of diffuse astrogliosis where numerous Olig2-labeled nuclei (black nuclei, arrowheads) were present. (C) Details of MBP staining from inset in A. The white matter adjacent to the diffuse astrogliosis was more myelinated (purple, linear structures; red arrows). Olig2-labeled black nuclei are indicated by arrowheads. (D) Representative low power image of deep white matter double-stained for GFAP (red) and MBP (green); case from contemporary cohort at 32 weeks PCA. Extensive myelination of the corpus callosum is seen at right in D, as visualized with the O4 antibody (green). Diffuse reactive astrogliosis (GFAP-staining; red, left) is present in the white matter but minimally involved the myelinated tract. (E) High-power detail at the edge of the myelinated tract in D (note myelinated axons at top of image). Numerous preOLs (green; arrowheads) and occassional more highly arborized immature OLs (green; arrows) were seen in the region of astrogliosis (red). Scale bars: A, 2 mm; B, C, 250 μm; D, 100 μm; E, 25 μm.