
Supplementary information

Microglia contribute to the propagation of A β into unaffected brain tissue

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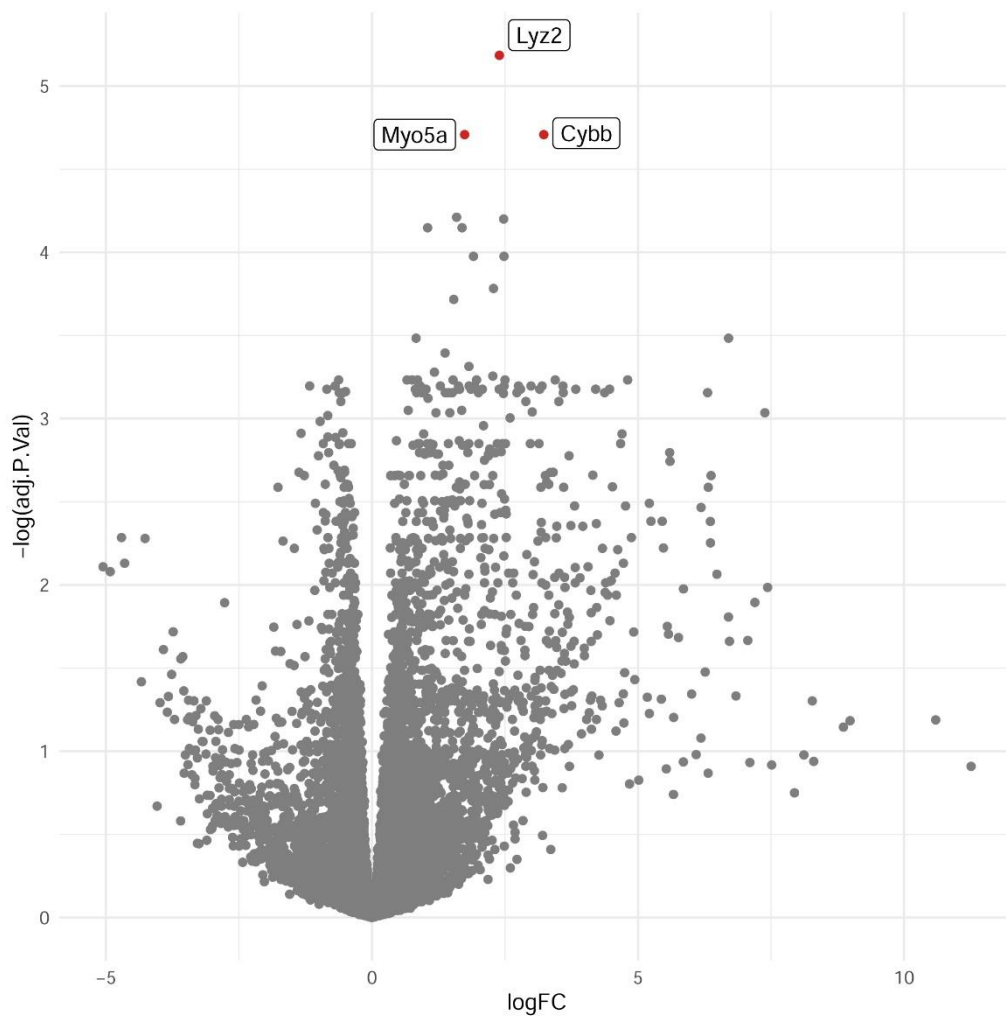
This PDF file includes:

Supplementary Data Fig. 1 to 3

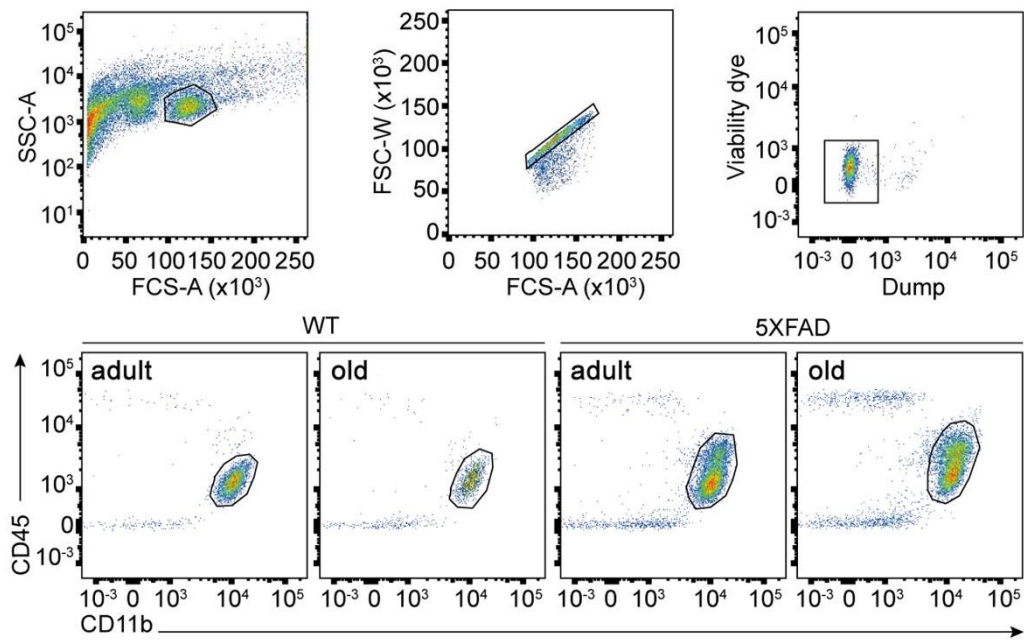
Captions for Supplementary Videos S1 to S6

Additional supplementary material for this manuscript includes the following:

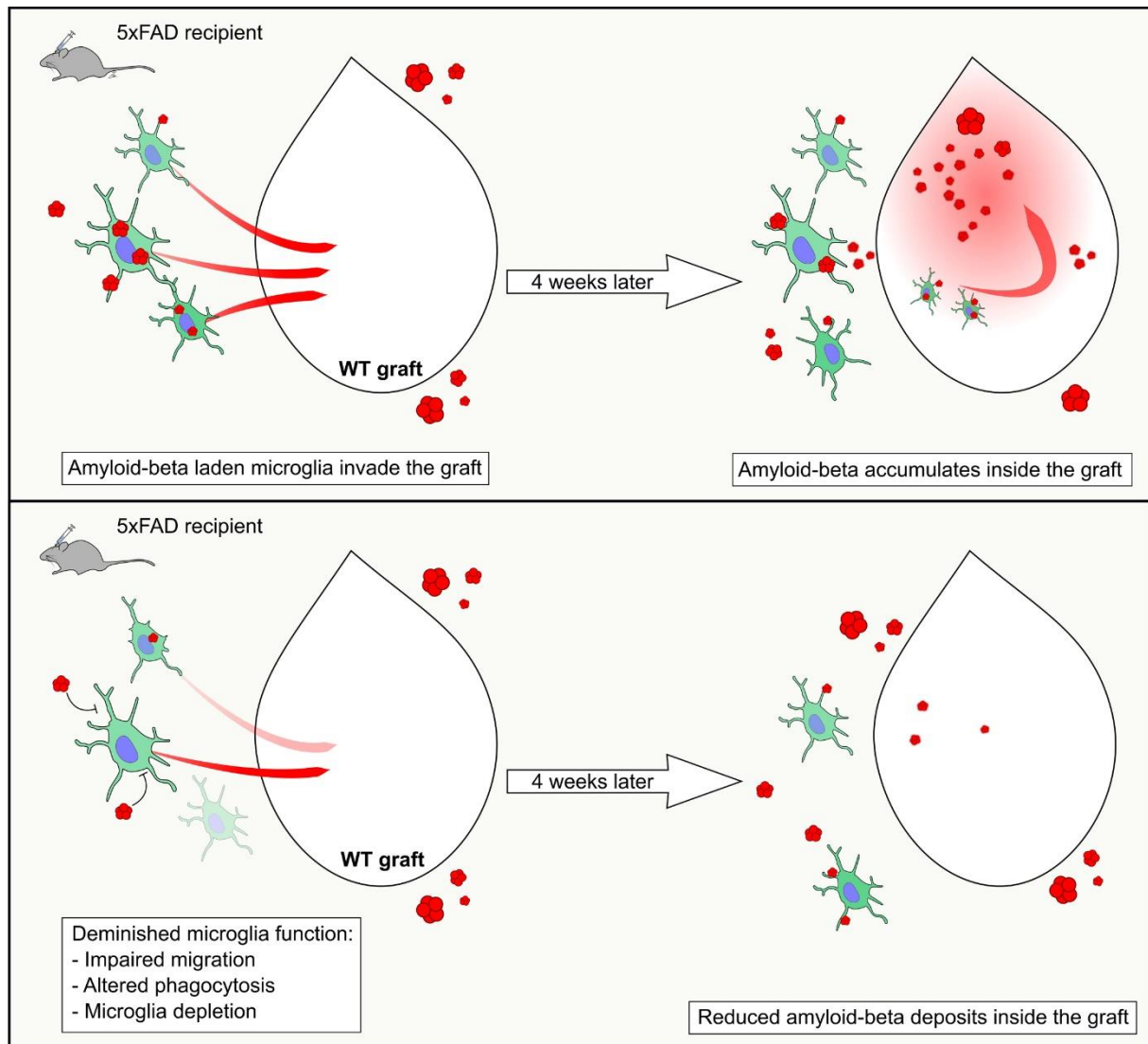
Supplementary Videos S1 to S6



Supplementary Figure 1. Volcano plot of differential gene expression analysis results. Labeled and red colored genes are significantly dysregulated between graft and control tissue at a multiple testing adjusted $p < 0.01$. Differentially expressed genes were determined using the Limma-voom package in R.



Supplementary Figure 2. FACS gating strategy. Gating strategy for flow cytometric analysis of single viable CD11b⁺ CD45^{lo} methoxy-X04⁻ and single viable CD11b⁺ CD45^{lo} methoxy-X04⁺ microglia from adult and old WT and 5xFAD mice.



Supplementary Figure 3. Schematic overview of A β propagation involving microglia.

Upper panel: Host microglia containing A β invade the WT graft in 5xFAD recipient mice leading to A β accumulation within the transplant. Lower panel: Manipulation of microglial function such as migration and phagocytosis or their elimination is accompanied by a reduction of A β load in the WT graft.

Supplementary Videos 1-6:

Video 1: Video file showing microglia *in vivo* under resting state condition in an Irf8^{+/-} mouse. Scale bar, 10 μ m.

Video 2: Video file showing microglia *in vivo* under resting state condition in an Irf8^{-/-} mouse. Scale bar, 10 μ m.

Video 3: Video file showing microglial responses to a localized laser-induced injury *in vivo* in an Irf8^{+/-} mouse. Scale bar, 15 μ m.

Video 4: Video file showing microglial responses to a localized laser-induced injury *in vivo* in an Irf8^{-/-} mouse. Scale bar, 15 μ m.

Video 5: Video file showing an A β -containing microglial cell moving towards the lesion. Scale bar, 20 μ m.

Video 6: Video file showing A β -containing microglia moving towards the lesion. Scale bar, 20 μ m.