Figure S1. PNN distribution in the cortex, Related to Figure 1

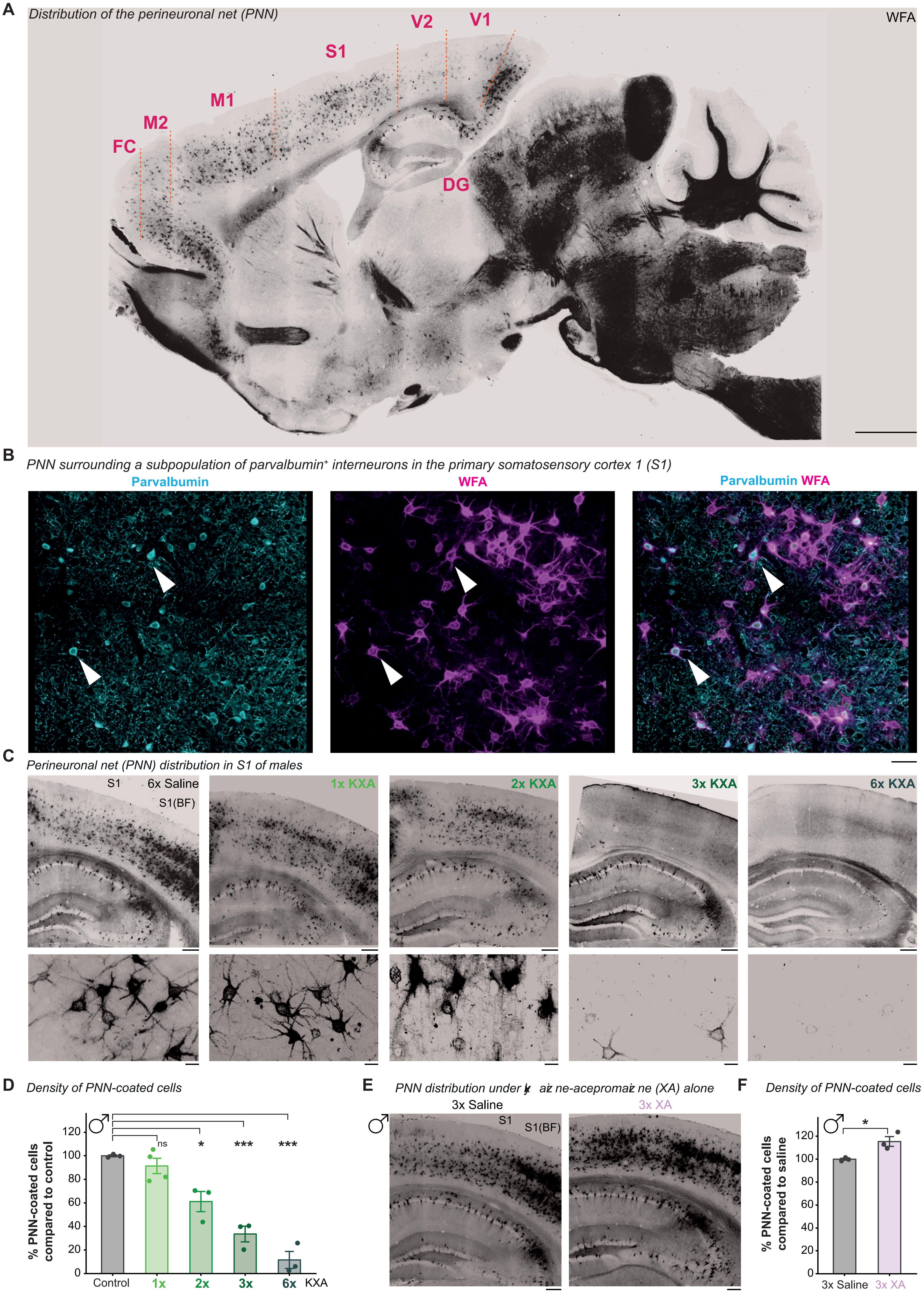

Figure S2. No PNN loss upon repeated saline injection, and no ketamine-induced apoptosis, Related to Figure 1

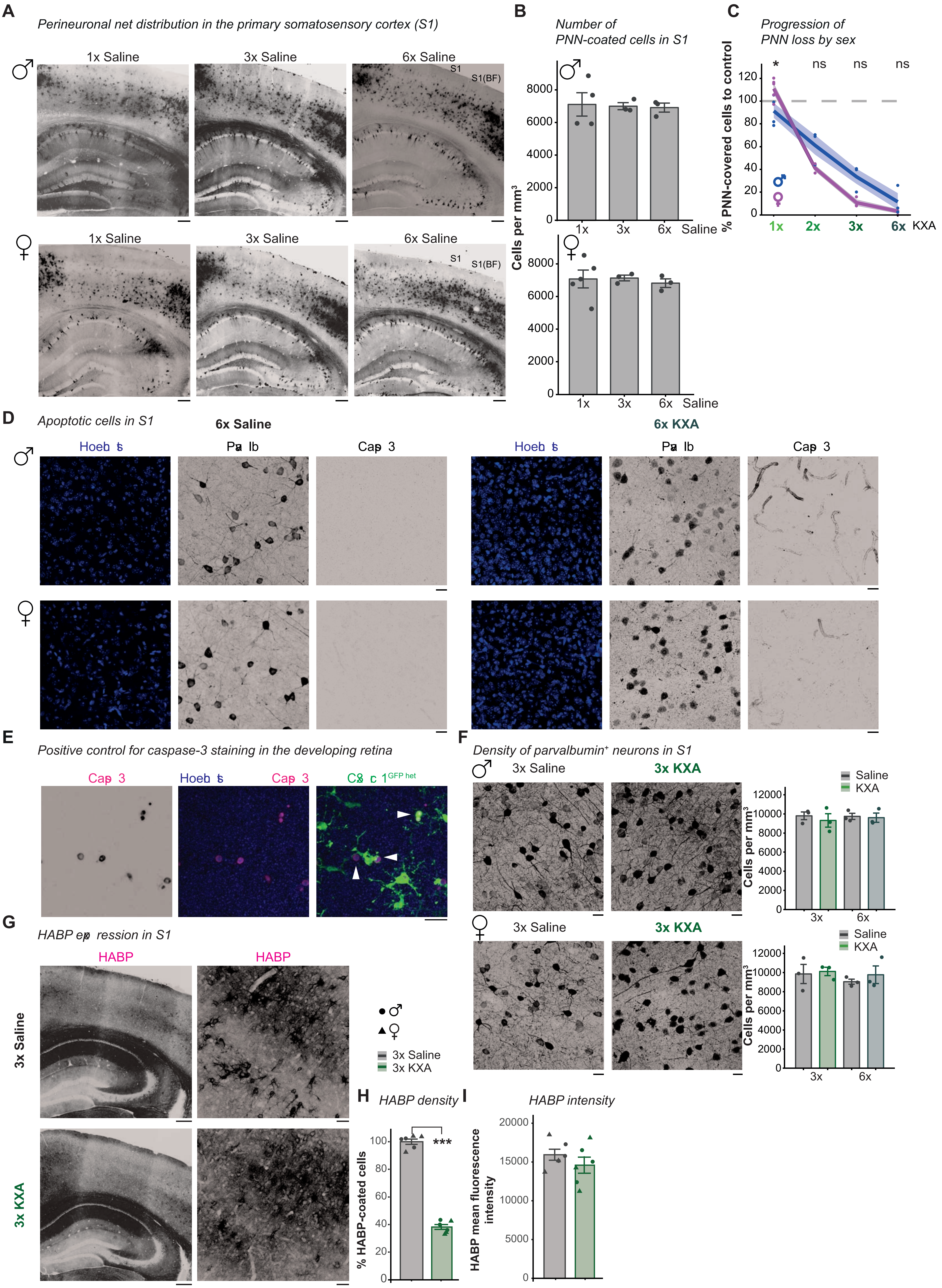

Figure S3. Ketamine causes transient PNN loss in V1, and is independent from repeated XA treatment alone and mouse strain background. Related to Figure. 1

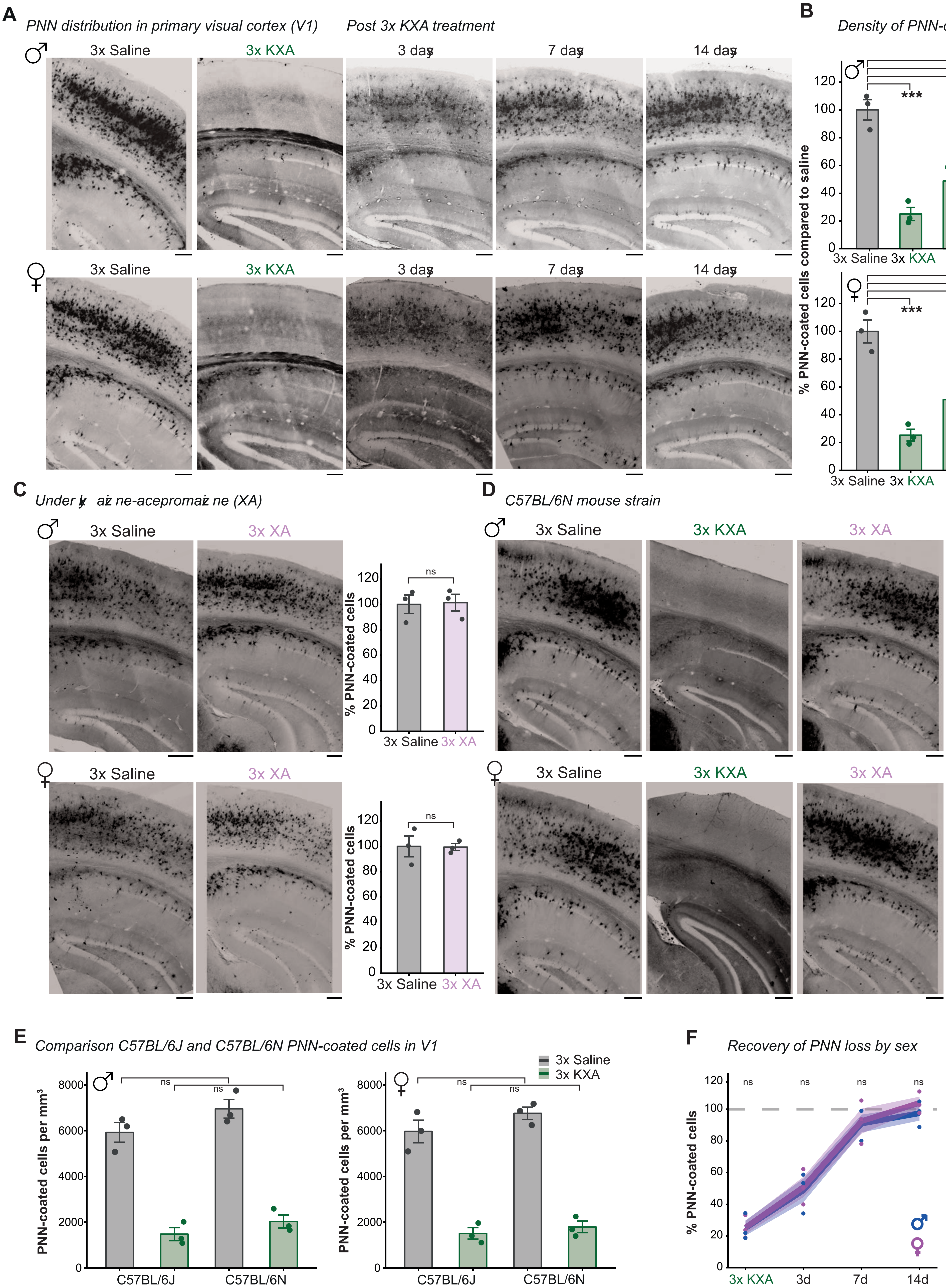

Figure S4. Repeated KXA treatment increased MMP-9 level in Pvalb⁺ neurons and microglia located in cortical layers 3-5, Related to Figure 2.

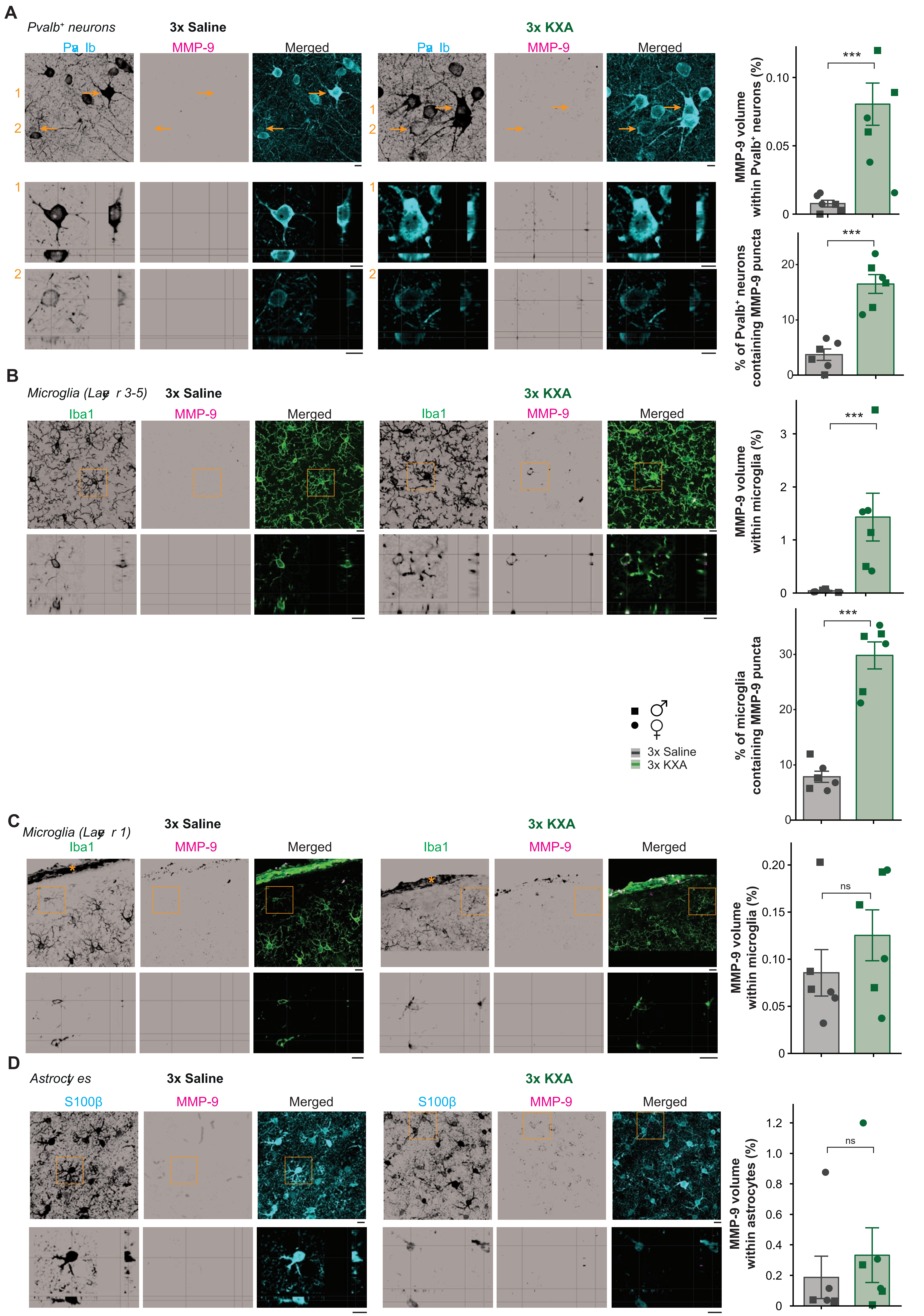

Figure S5. CD68 expression increased during ketamine exposure and gradually recovered after last injection, Related to Figure 2.

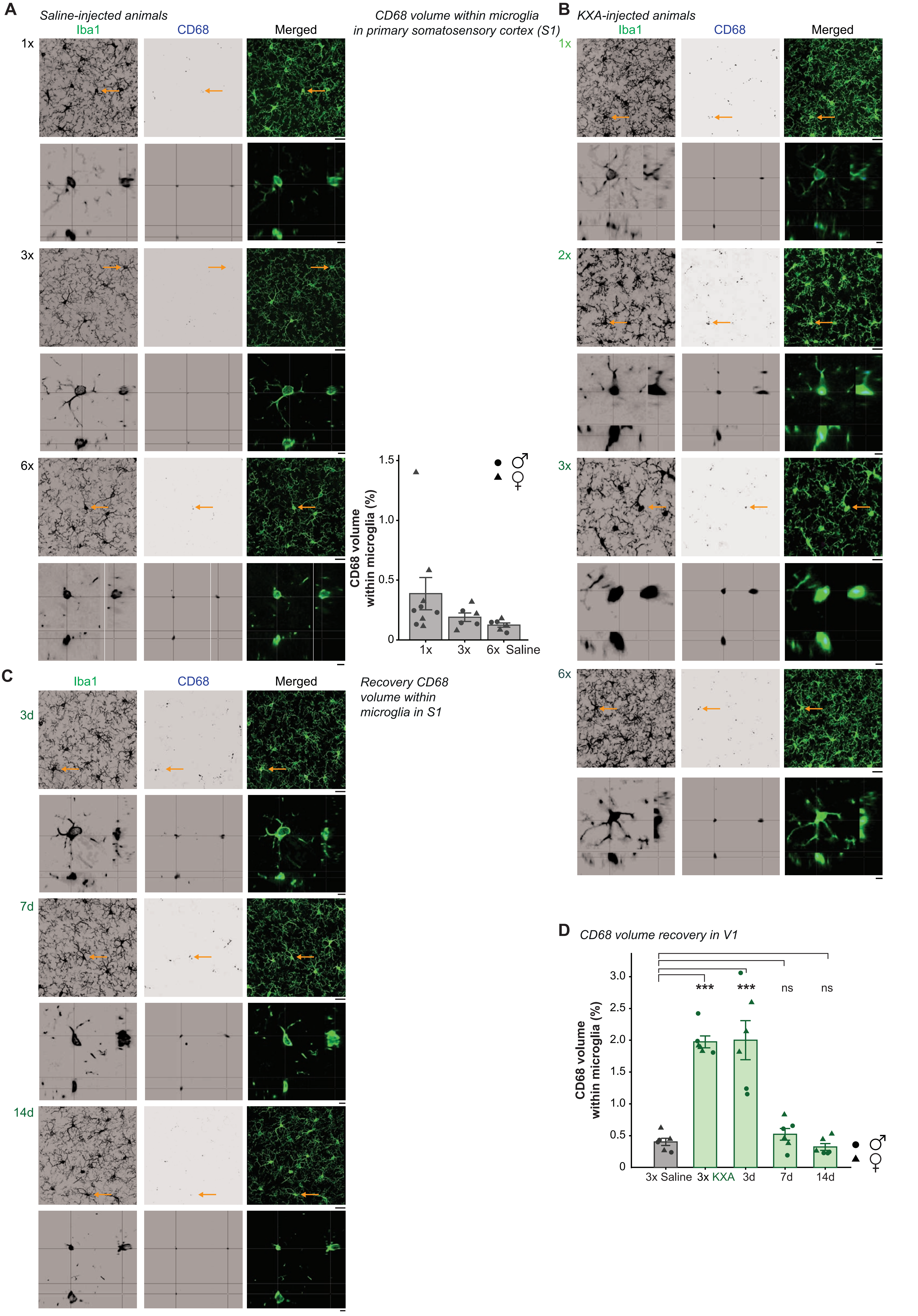

Figure S6. Multiple microglia contain PNN/CD68 fragments after ketamine exposure, Related to Figure 2.

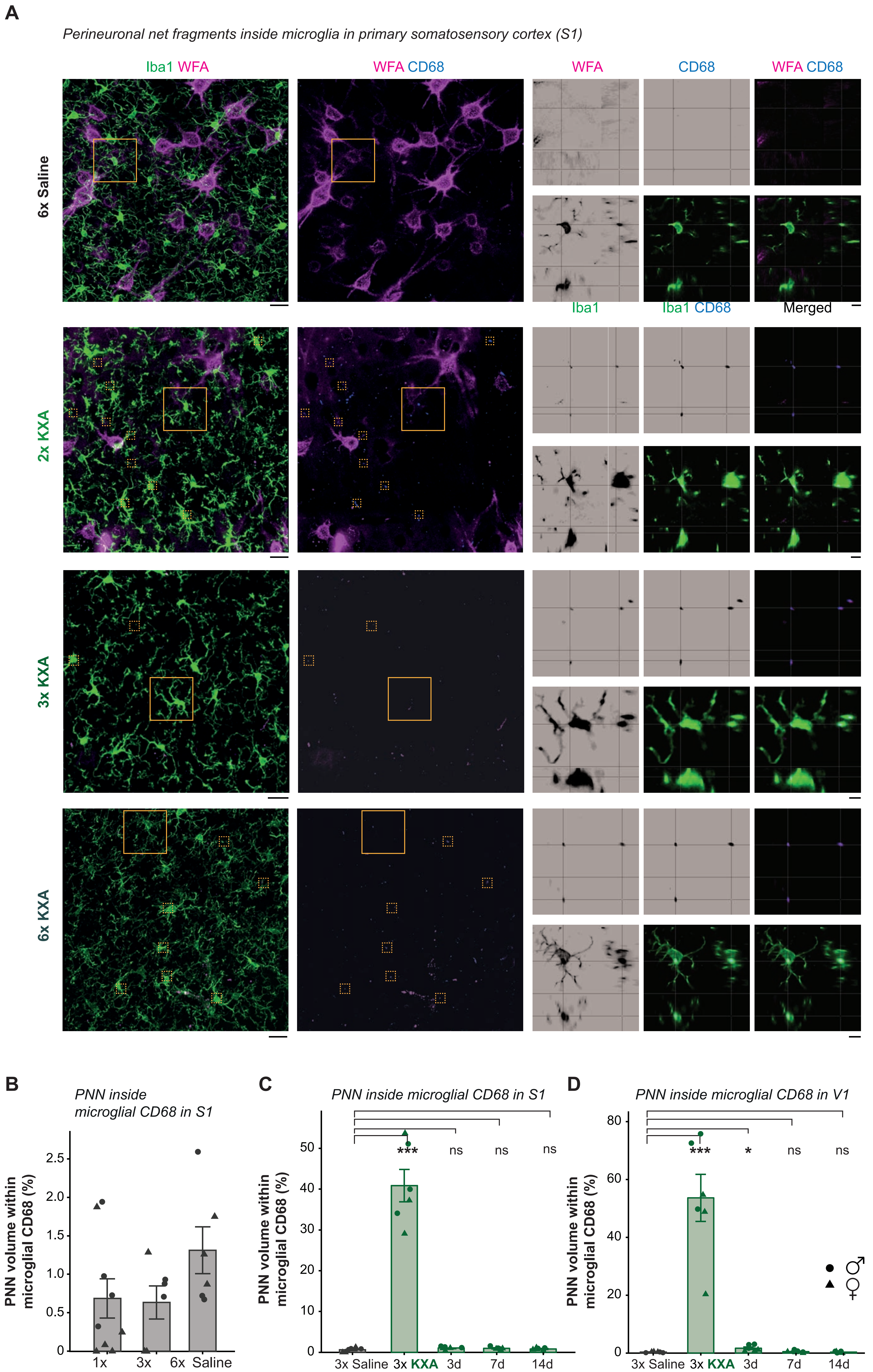

Figure S7. Consequences of microglial manipulation, Related to Figures 3 and 4.

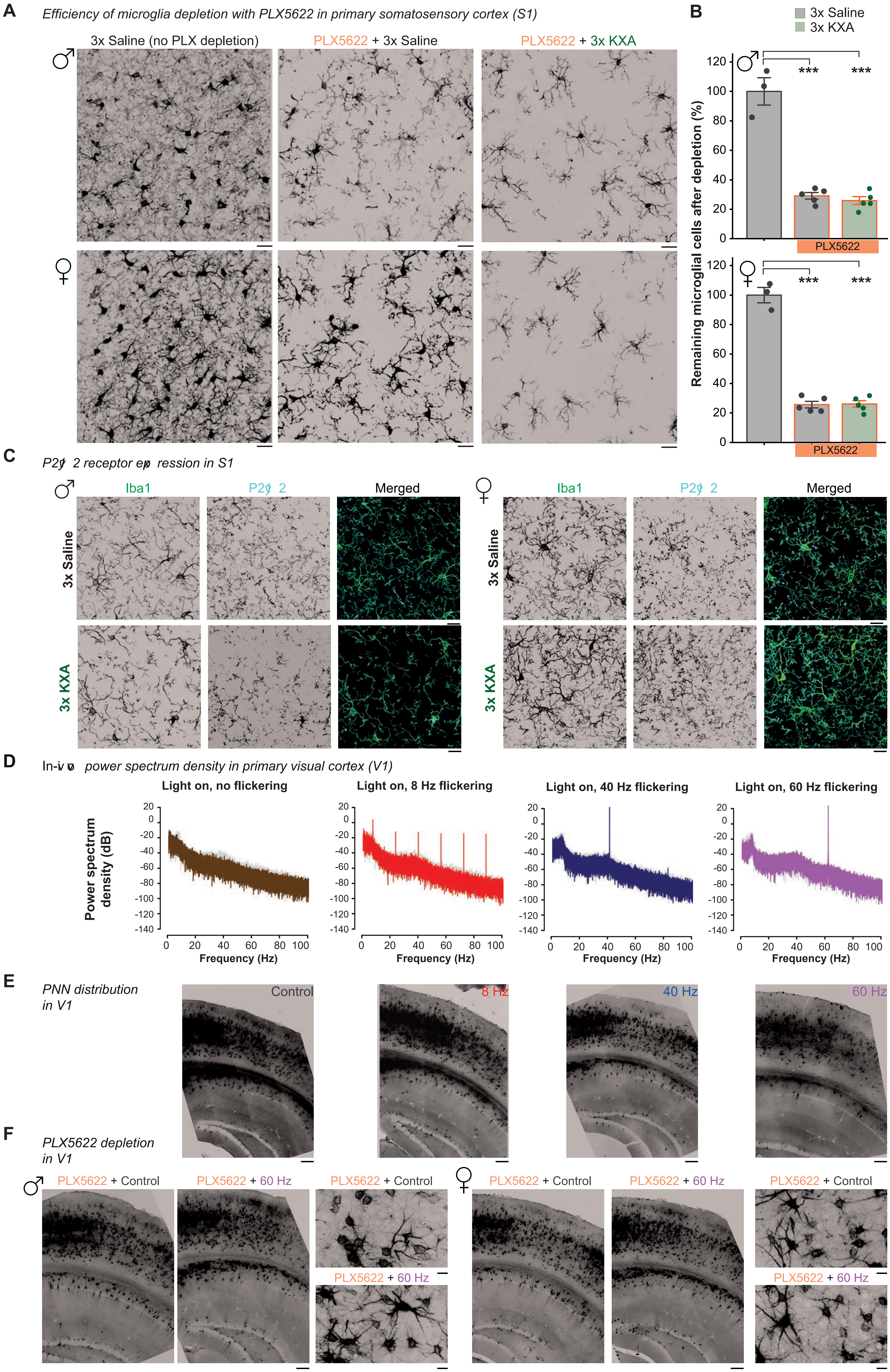

Figure S8. Effects of light flickering on parvalbumin⁺ neuron-microglia distance and MMP-9 expression level, Related to Figure 4.

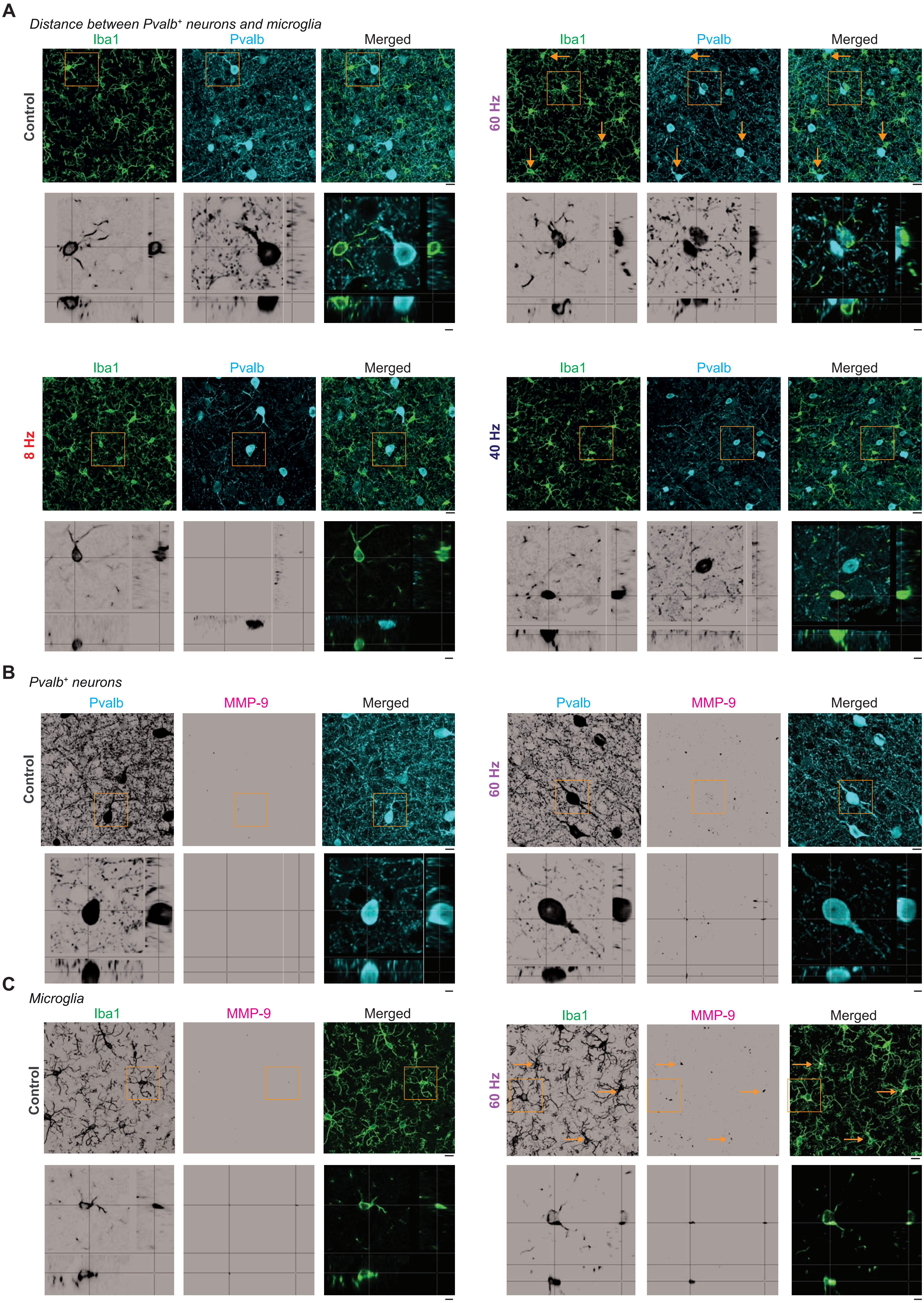

Figure S9. 60 Hz light-flickering induces PNN removal via microglia, Related to Figure 4.