

Supplementary Material

MiR-30a Positively Regulates the Inflammatory Response of Microglia in Experimental Autoimmune Encephalomyelitis

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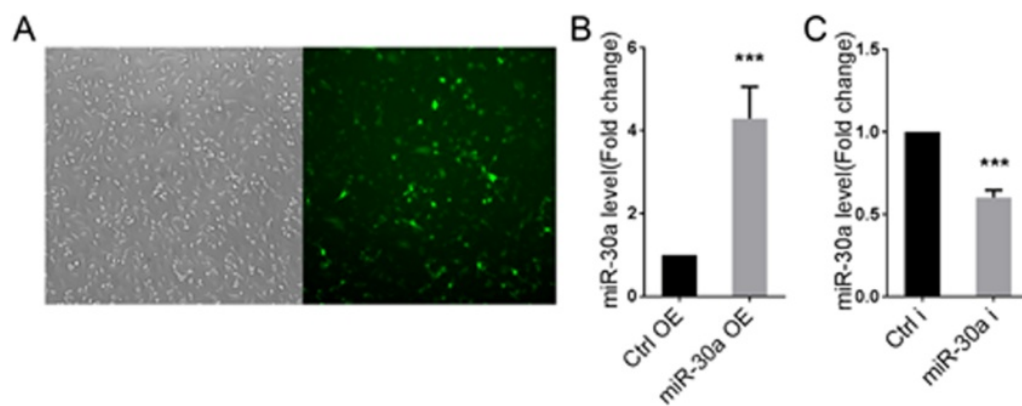


Fig. S1 Lentivirus-mediated overexpression or knockdown of miR-30a in microglia. Representative fluorescence image (A) and quantitative PCR analysis of miR-30a in microglia transduced with the miR-30aOE (B) or miR-30ai (C) lentivirus.

*** $P < 0.005$ (Student's *t*-test); mean \pm SD.

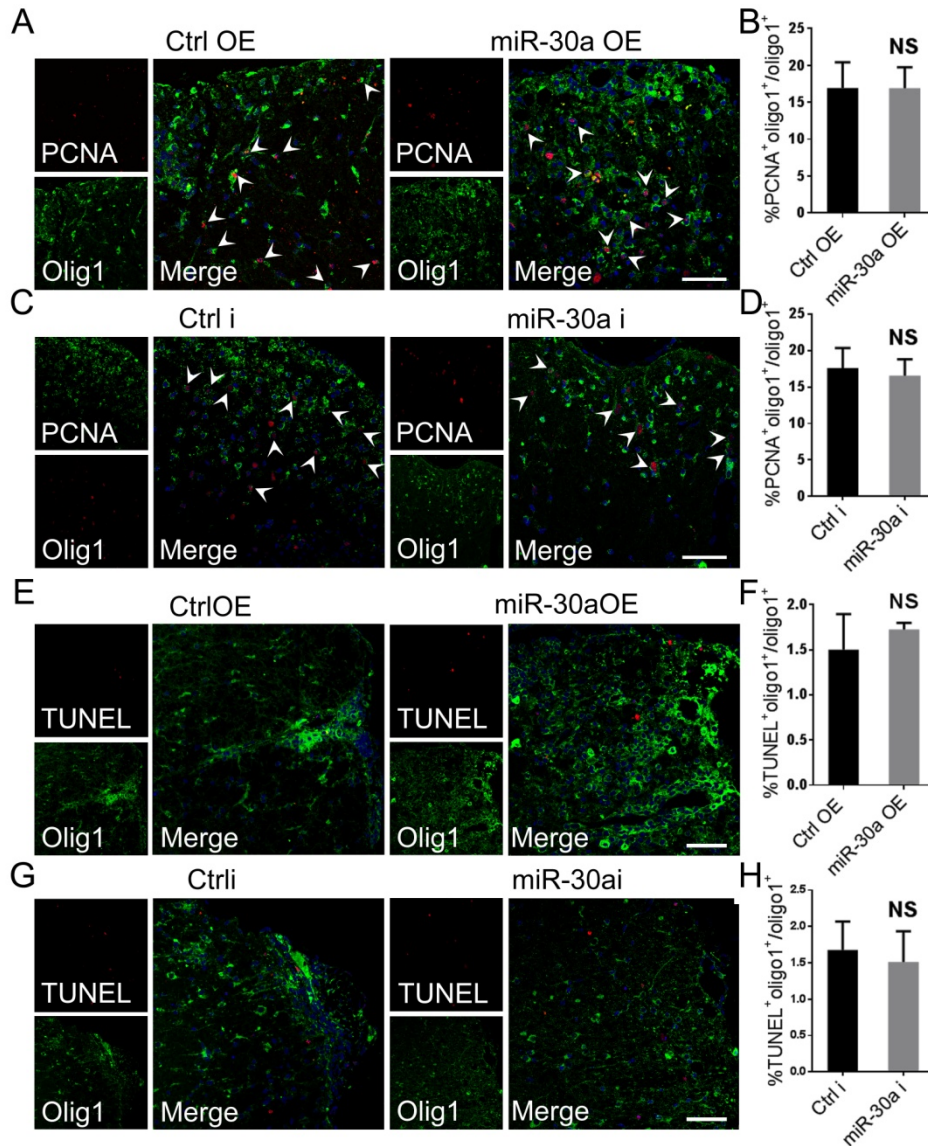


Fig. S2 Effects of MiR-30a-modified microglia on survival and proliferation of OPCs *in vivo*. A-D Representative fluorescence images and statistical analysis of anti-Olig1 (green) and anti-PCNA (red) IHF from EAE mice (30 dpi) transplanted with MG^{CtrlOE}/MG^{miR-30aOE} (A, B) or MG^{Ctrl i}/MG^{miR-30a i} (C, D) ($n = 3$ experiments). Arrowheads indicate PCNA⁺Olig1⁺ cells. The ratio of PCNA⁺/Olig1⁺ cells was calculated and compared between groups. Scale bars, 50 μ m. No significant difference *versus* control (Student's *t*-test); mean \pm SD. E-H Representative fluorescence images and statistical analysis of anti-Olig1 (green) IHF and TUNEL

(red) analysis from EAE mice (30dpi) transplanted with $MG^{CtrlOE}/MG^{miR-30aOE}$ (E, F) or $MG^{Ctrli}/MG^{miR-30ai}$ (G, H) ($n = 3$ experiments). The ratio of $TUNEL^+/Olig1^+$ cells was calculated and compared between groups. Scale bars, 50 μm . No significant difference *versus* control (Student's *t*-test); mean \pm SD.

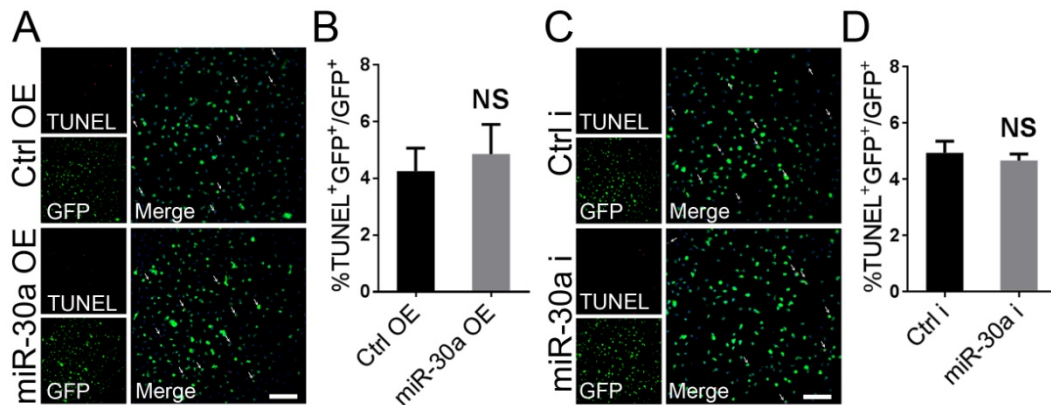


Fig. S3 Effects of MiR-30a on survival of microglia. TUNEL staining images and analysis of apoptosis in microglia after adding miR-30a OE (A, C) or miR-30ai (B, D) lentivirus for 24 h *versus* control ($n = 3$ experiments). The ratio of $TUNEL^+/Hoechst^+$ cells was calculated and compared between groups. Scale bars, 50 μm . No significant difference *versus* control (Student's *t*-test); mean \pm SD.