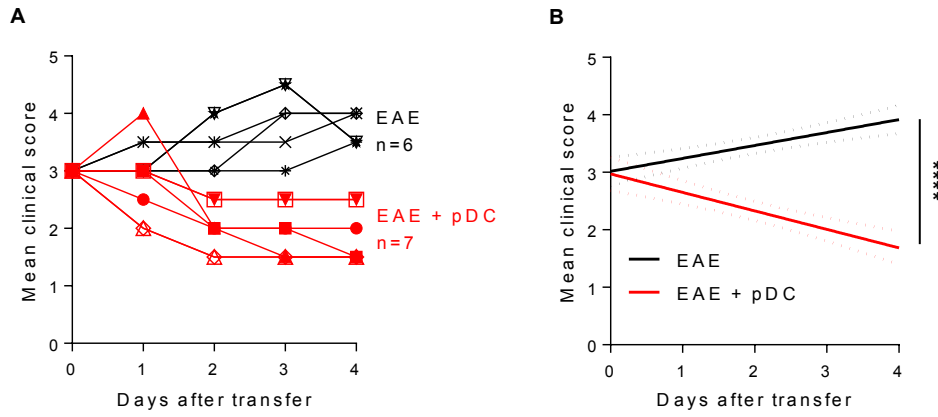
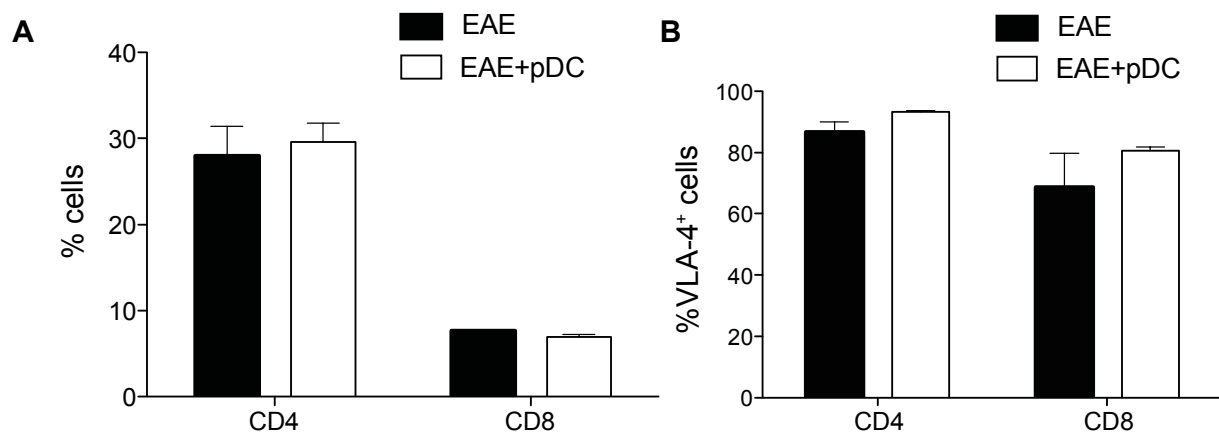


pDC therapy induces recovery from EAE by recruiting endogenous pDC to sites of CNS inflammation

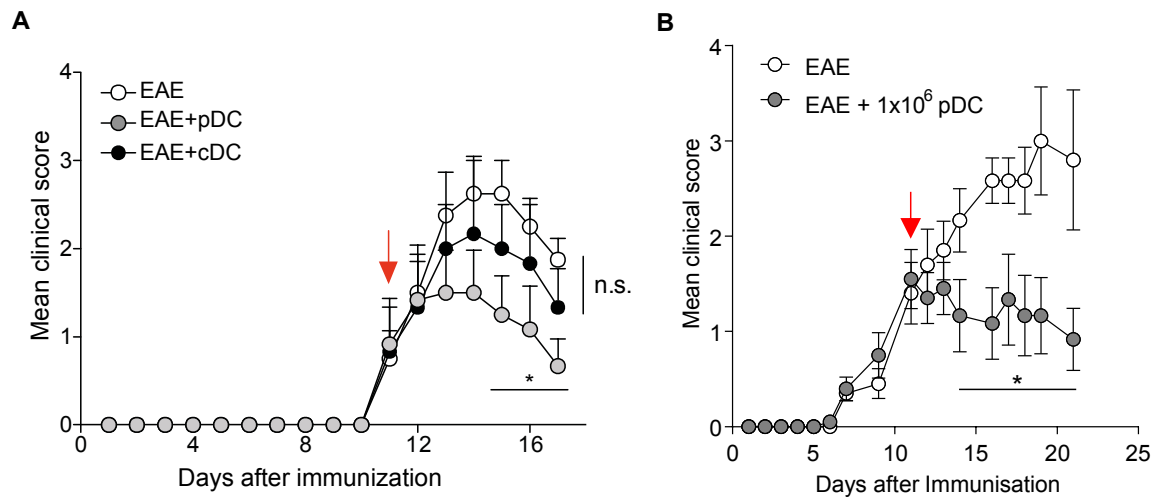
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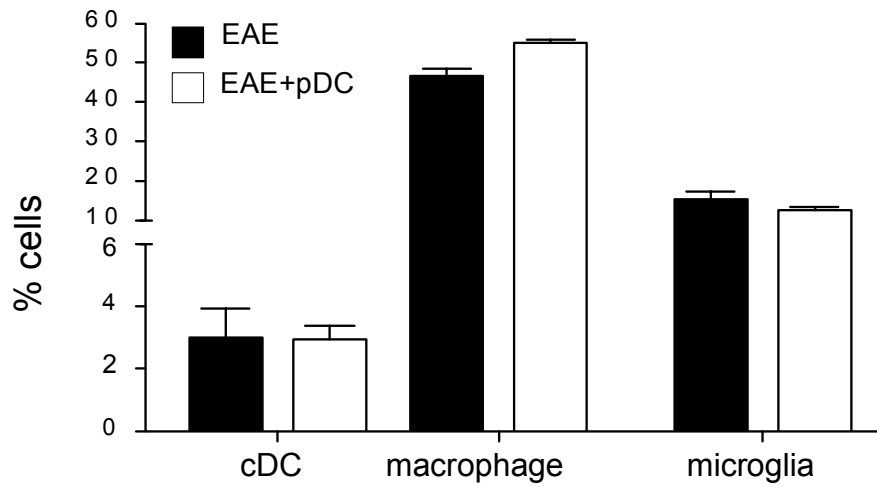
Supplementary Fig. 1: (A, B) EAE was induced in WT mice by immunization with MOG₃₅₋₅₅. EAE mice exhibiting a clinical score of 3 were injected i.v. (EAE+pDC) or not (EAE) with MOG₃₅₋₅₅-loaded BM-pDCs). Clinical scores were followed every day for four days after pDC transfer. **(A)** Individual clinical scores. **(B)** Linear regression of mean clinical scores for each group. Standard two-tailed Student's *t* test. *****P* < 0.0001



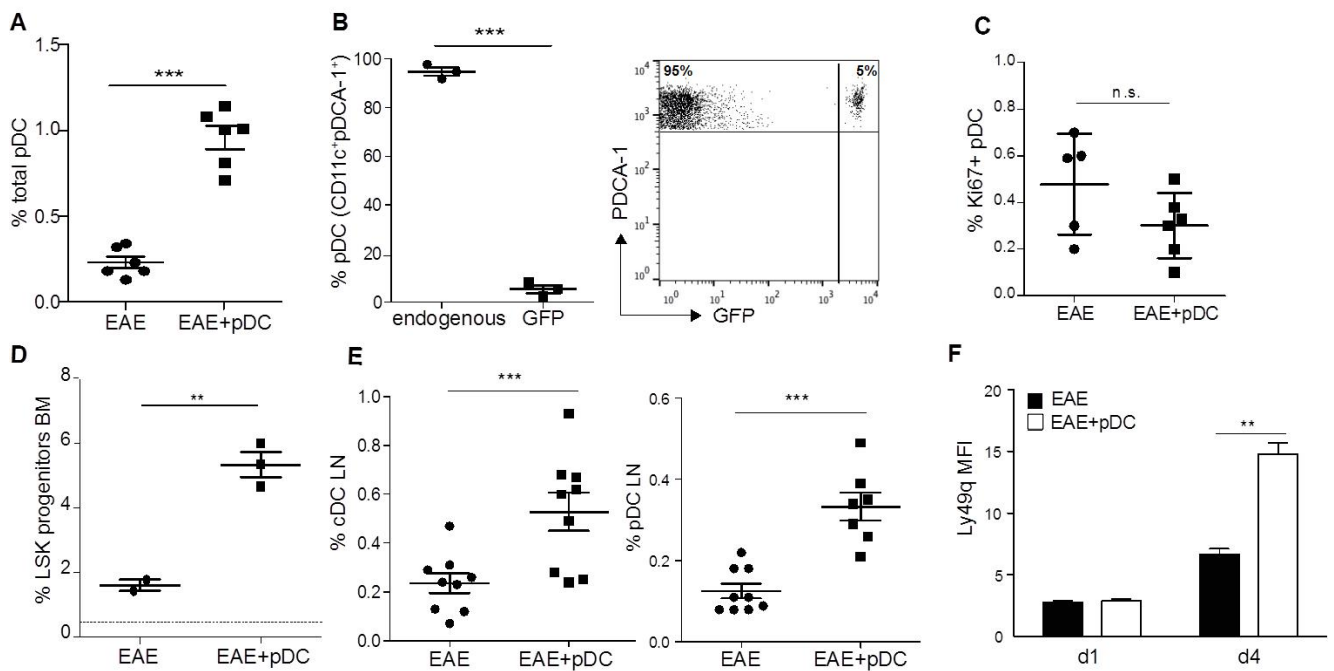
Supplementary Fig. 2: (A, B) EAE was induced in WT mice by immunization with MOG₃₅₋₅₅. EAE mice were injected i.v. (EAE+pDC) or not (EAE) with MOG₃₅₋₅₅-loaded BM-pDCs during disease acute phase (between days 10-12). Frequencies of **(A)** CD4⁺ and CD8⁺ T cells, and **(B)** VLA-4⁺ cells among CD4⁺ and CD8⁺ T cells in SC of EAE mice 4 days after pDC transfer. Data are representative of four individual experiments with 6-8 mice/group.



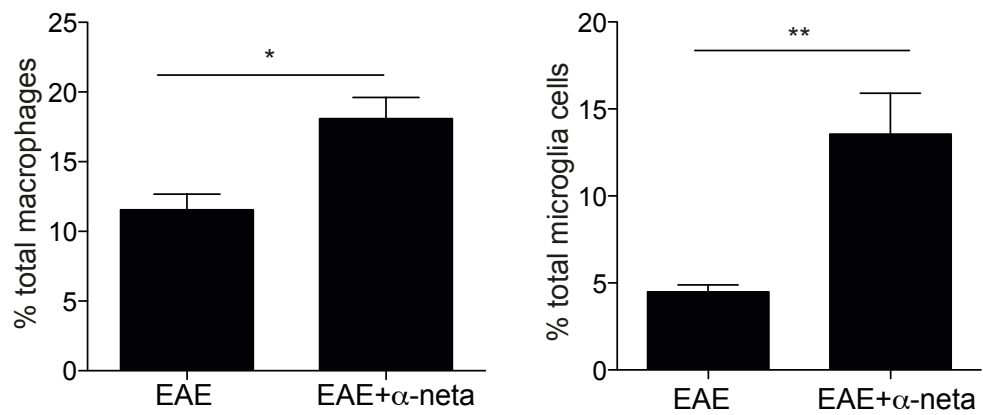
Supplementary Fig. 3: (A) EAE was induced in WT mice and 5×10^6 BM-derived, MOG₃₅₋₅₅-loaded, WT pDCs (EAE+pDC) or cDCs (EAE+cDC) were transferred or not (EAE) into mice during disease acute phase (arrow). (B) EAE was induced in WT mice and 1×10^6 BM-derived, MOG₃₅₋₅₅-loaded, WT pDCs (EAE+pDC) were transferred or not (EAE) into mice during disease acute phase (arrow). (A,B) Clinical scores were followed daily. Data are representative of 2 independent experiments. 2-way ANOVA with Bonferroni post hoc test; * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$.



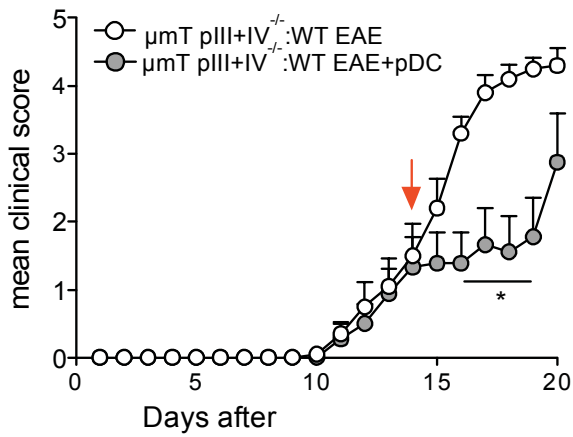
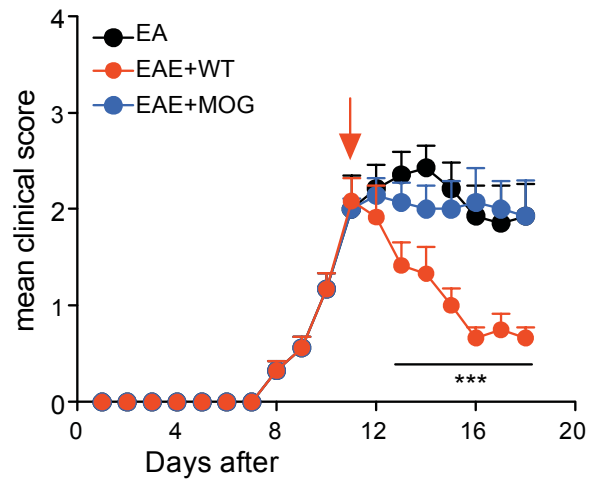
Supplementary Fig. 4: EAE was induced in WT mice and BM-derived, MOG₃₅₋₅₅-loaded, pDCs from WT mice were transferred into mice during EAE acute phase. SC cells from control EAE (EAE) or pDC transferred EAE (EAE+pDC) mice were analysed 4 days after pDC transfer. Graph shows the frequency of cDCs (gated as CD45^{hi}CD11c^{hi}PDCA-1^{neg}), macrophages (gated as CD45^{hi}CD11b^{hi}PDCA-1^{neg}) and microglial cells (gated as CD45^{low}CD11b^{int}PDCA-1^{neg}) in SC. Data are representative of 3 independent experiments with 6 mice/group.



Supplementary Fig. 5: pDC transfer induces *de novo* generation of protective pDCs. (A-F) EAE was induced in WT mice and BM-derived, MOG₃₅₋₅₅-loaded, GFP⁺pDCs were transferred into mice during EAE acute phase. (A-E) Cells from control (EAE) or GFP⁺pDC transferred (EAE+pDC) EAE mice were analysed in indicated organs by flow cytometry either one or four days after pDC transfer. Graphs show frequencies of (A) total pDCs in BM, or (B) endogenous and GFP⁺ transferred pDCs among total pDCs in BM from pDC transferred mice (left). Representative FACS profile shows the frequency of GFP⁺ (exogenous) and GFP⁻ (endogenous) pDCs among total pDCs (right) in BM. (C) Frequency of Ki67⁺ proliferating cells among total pDCs in BM. (D) Frequency of BM-LSK progenitors one day after pDC transfer. (E) Frequencies of cDCs (left) and pDCs (right) in draining LN of control EAE (EAE) and pDC transferred mice (EAE+pDC) four days after pDC transfer. (F) Ly49q expression by total pDCs in BM at one and four days after pDC transfer. Data are representative of 5 independent experiments with 4-6 mice/group each. (A-F) Standard two-tailed Student's *t* test. **P* < 0.05; ***P* < 0.01; ****P* < 0.001.



Supplementary Fig. 6: EAE was induced in WT mice and α -NETA was injected i.p. or not from day 11 to day 15. Frequency of macrophages and microglial cells were analysed in SC 4 days after pDC transfer. Data are representative of 2 independent experiments with 4 mice/group each. Data represent mean \pm SEM. Standard two tailed Student's *t* test; **P* < 0.05; ***P* < 0.01; ****P* < 0.001.

A**B**

Supplementary Fig. 7: (A) EAE was induced in indicated $\mu\text{mT pIII+IV}^{-/-}$:WT chimeric mice and BM-derived, WT MOG₃₅₋₅₅-loaded pDCs were transferred into mice during EAE acute phase (red arrows). Clinical scores were followed daily. Data are representative of 3 independent experiments with 8 mice/group each. **(B)** EAE was induced in WT mice and BM-derived MOG₃₅₋₅₅ loaded WT pDCs (EAE+WTpDC), or MOG₃₅₋₅₅ peptide alone (EAE+MOG) were injected or not (EAE) during EAE acute phase (red arrows). Clinical scores were followed daily. Data are representative of 2 independent experiments with 3-4 mice/group. **(A-B)** Data represent mean \pm SEM. 2-way ANOVA with Bonferroni post hoc test; * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$.