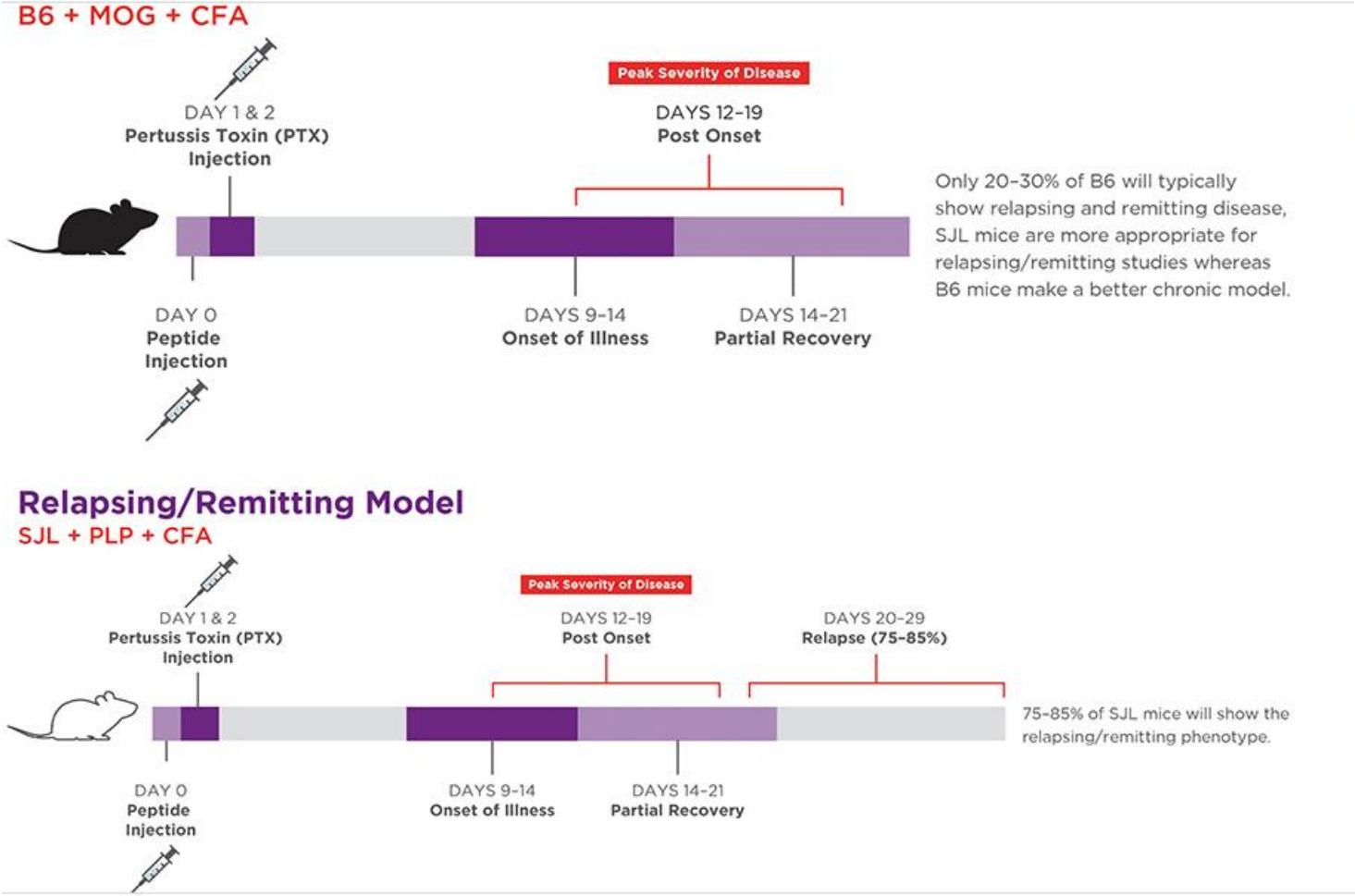
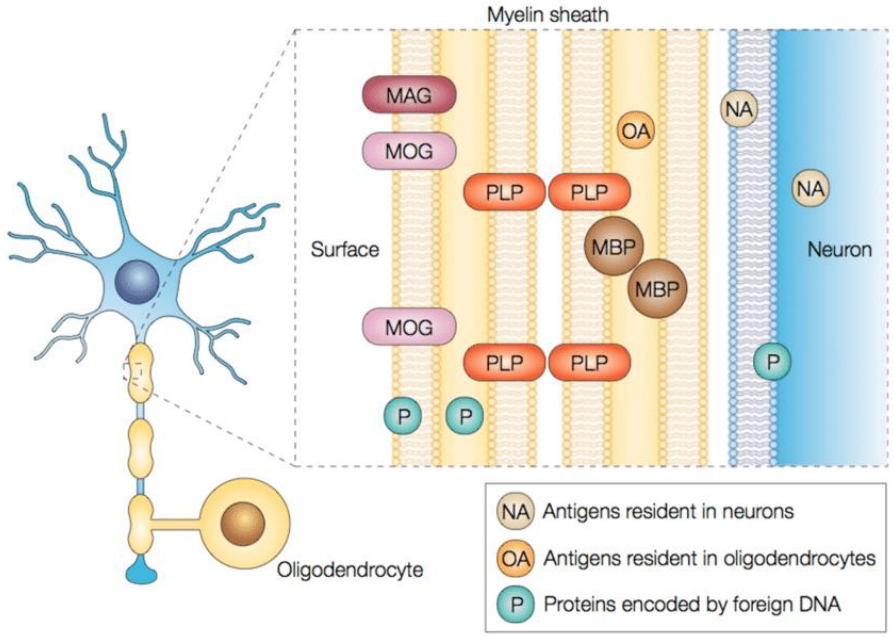
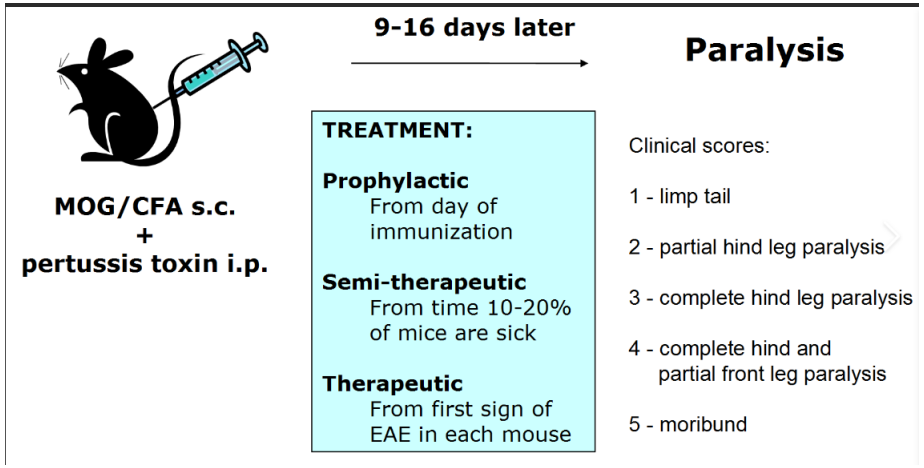
Treatment with mRNA and EAF



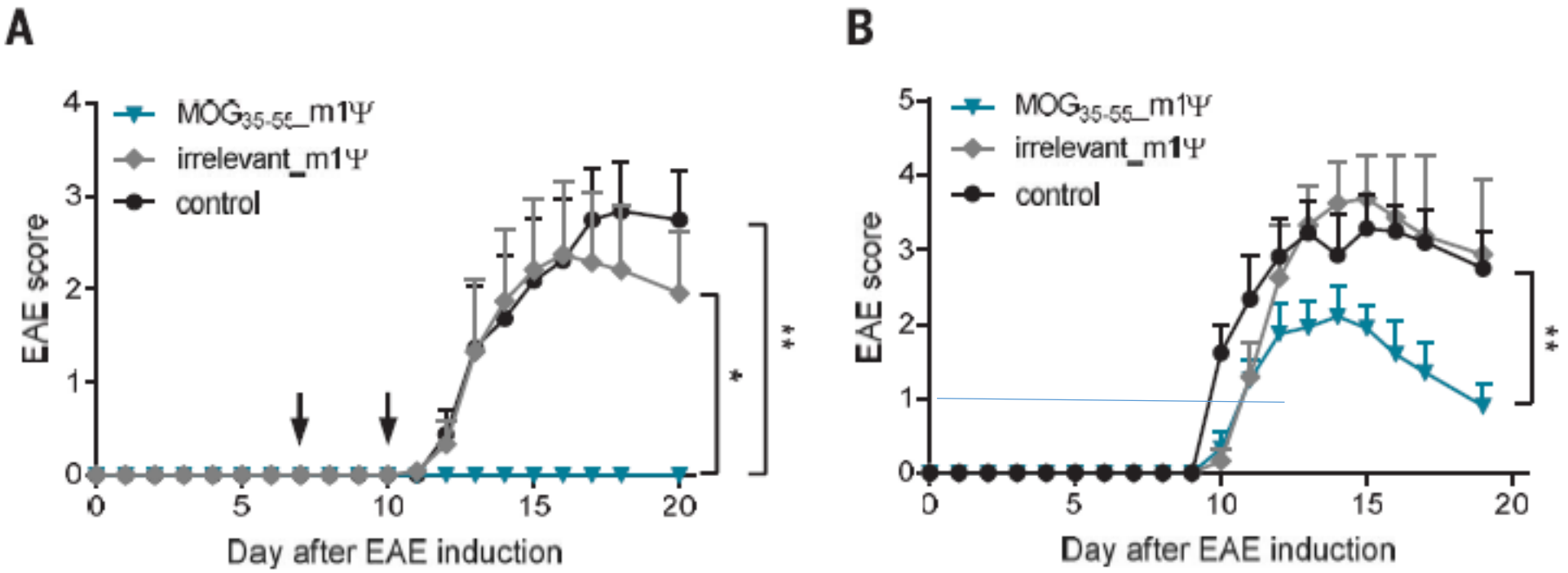




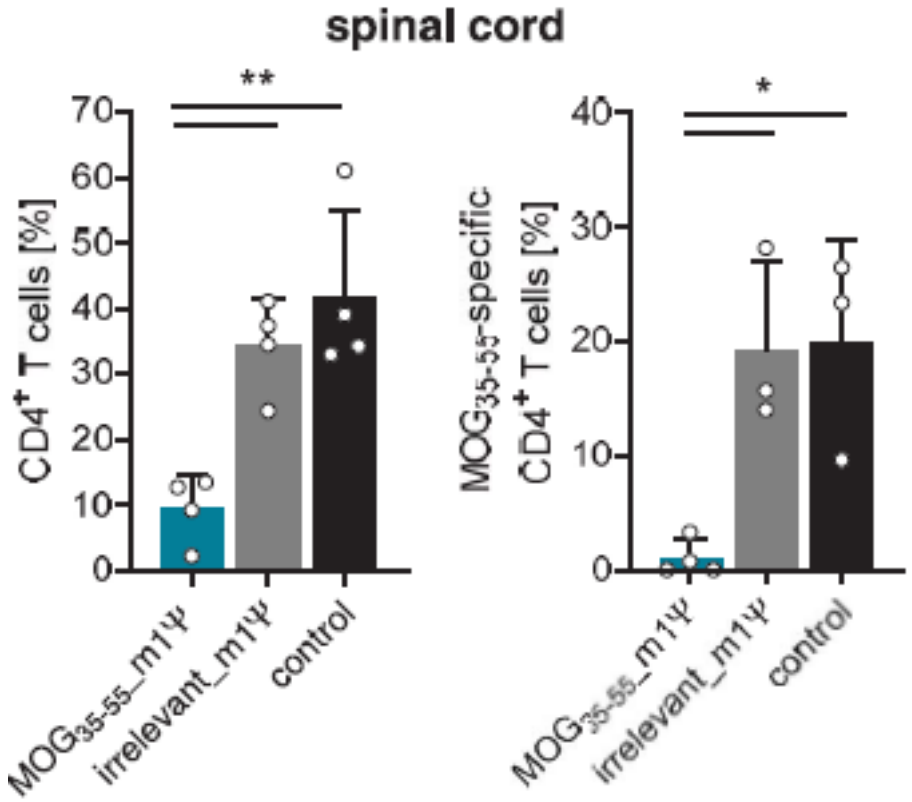
Prevention and therapeutic impact

D7 and D10 after induction

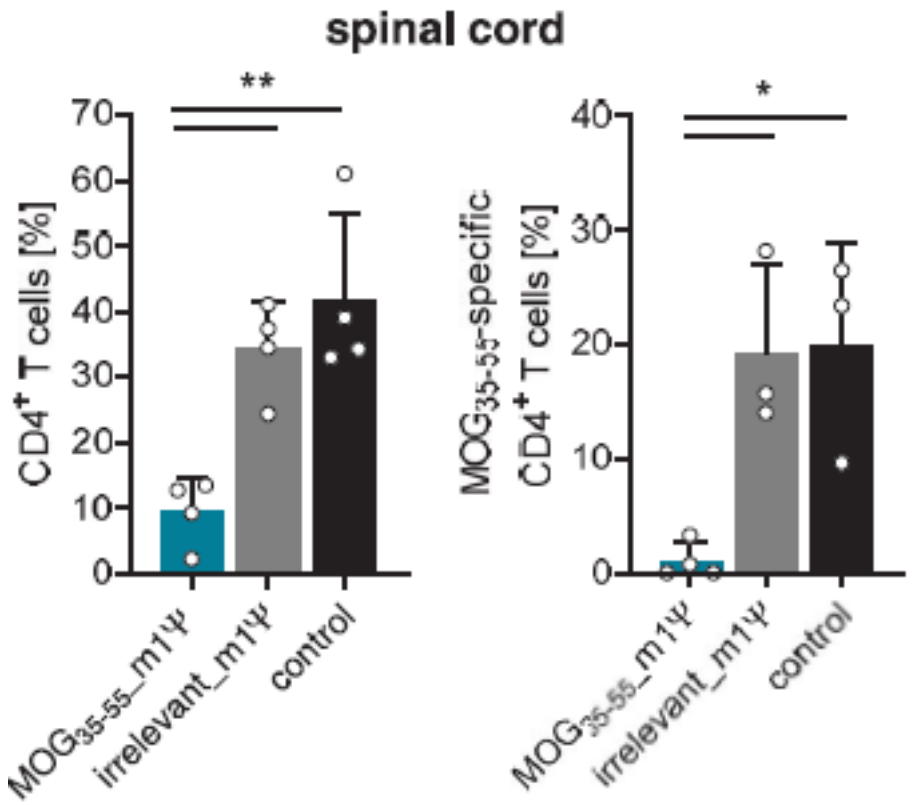
Disease progression
Paralysis of the tail or hind limbs

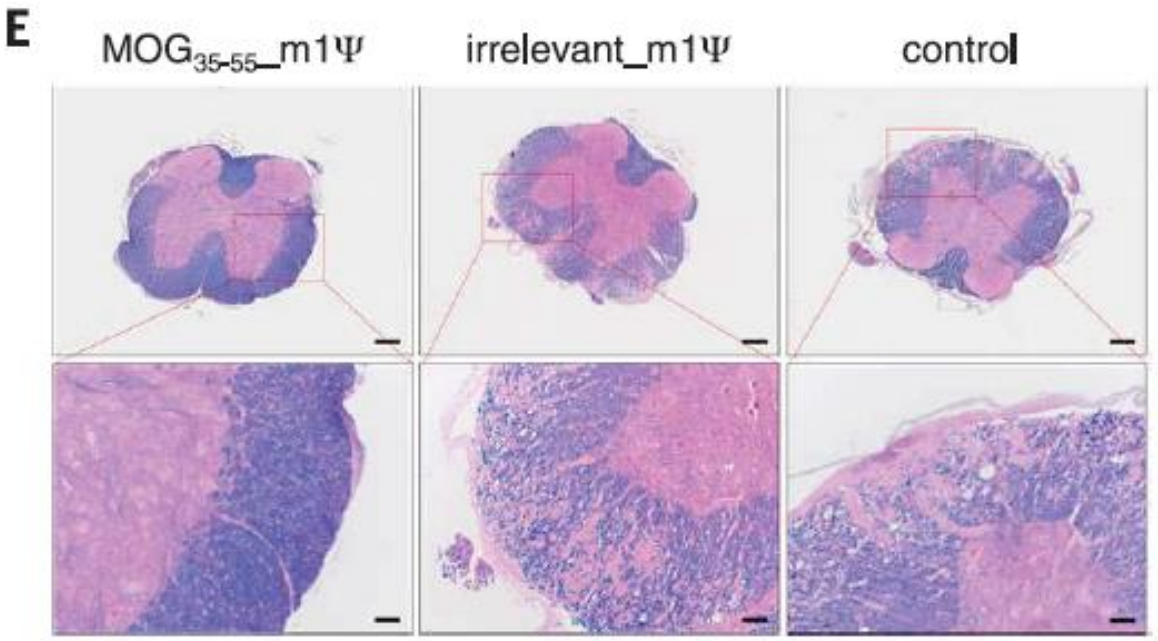


Impact on CNC infiltration

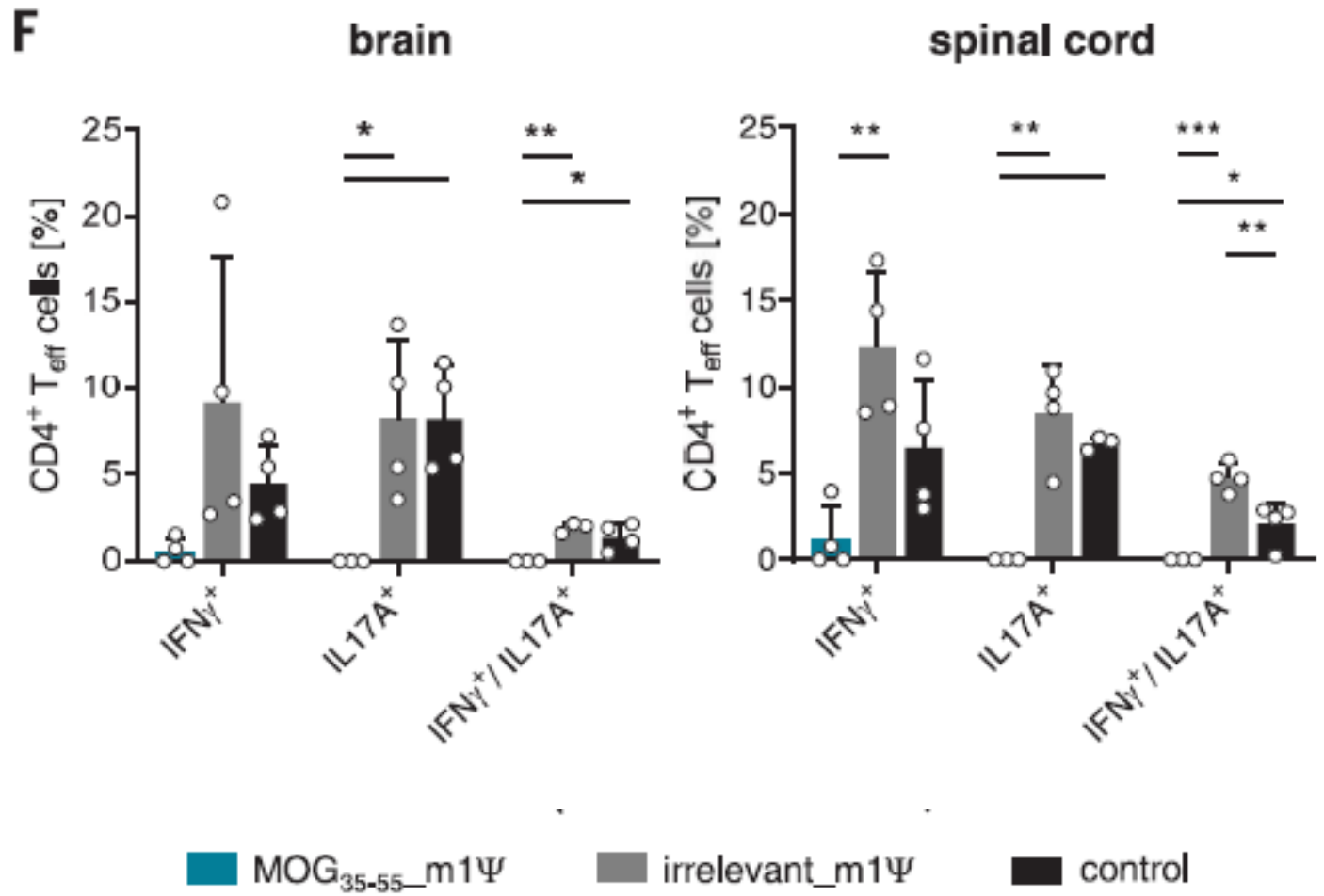


Impact on CNC infiltration

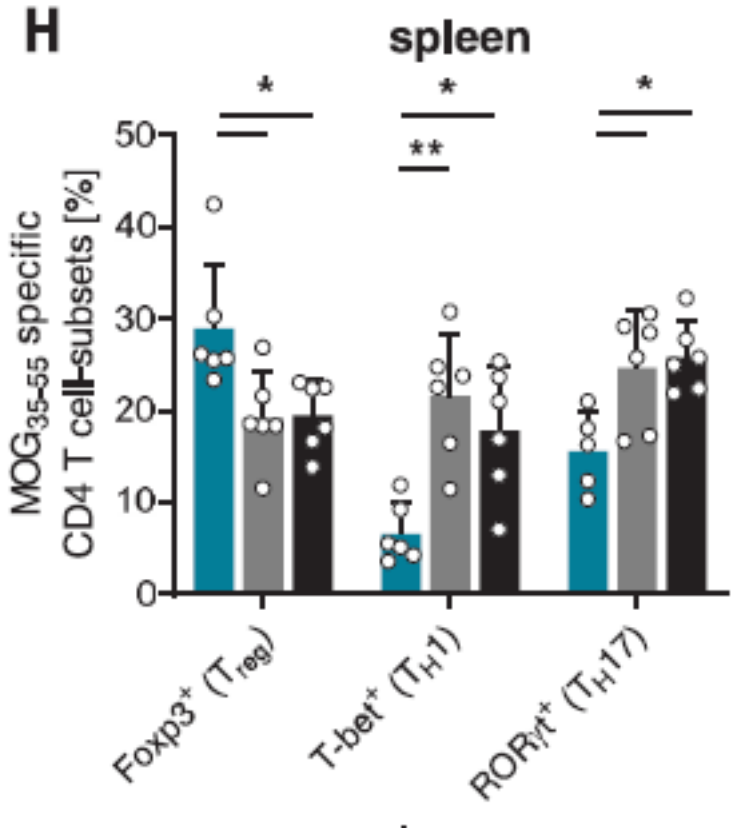




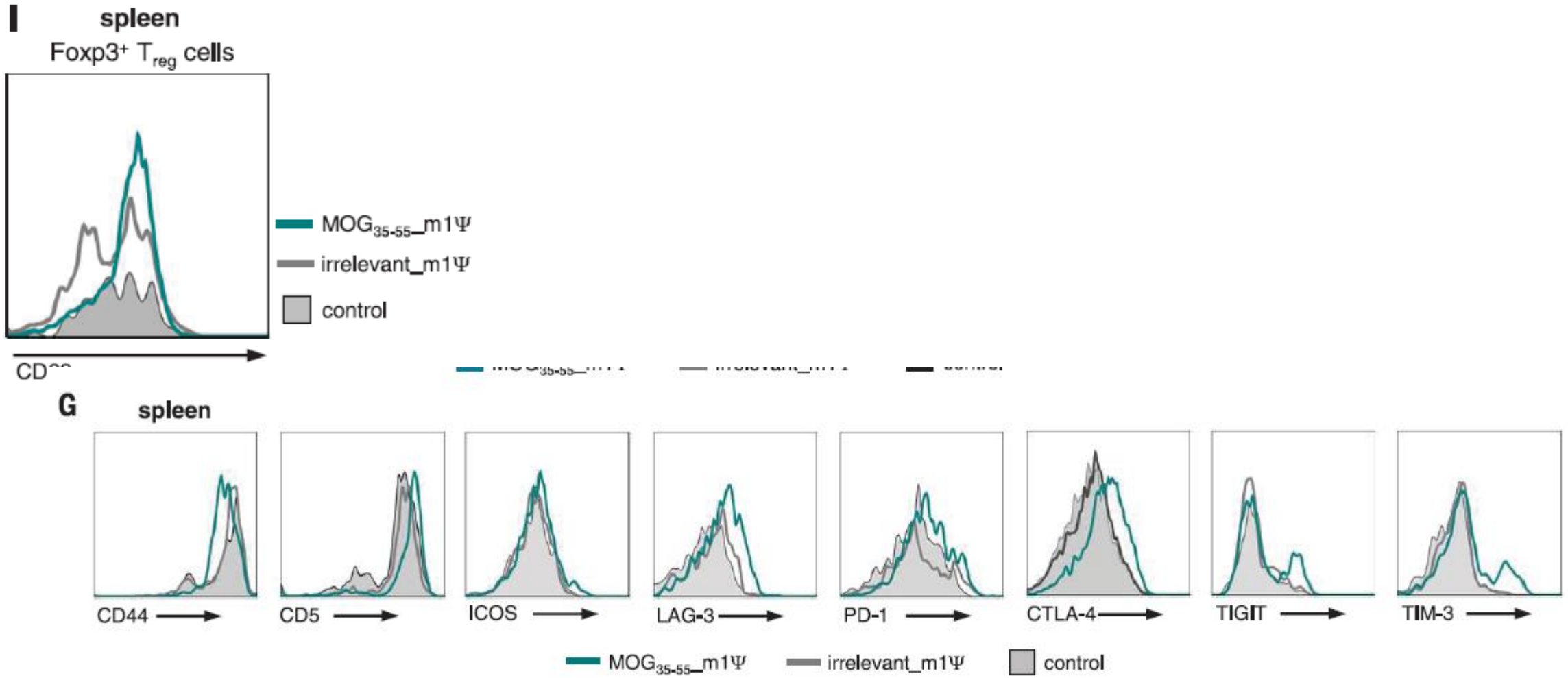
Impact on CNC infiltration



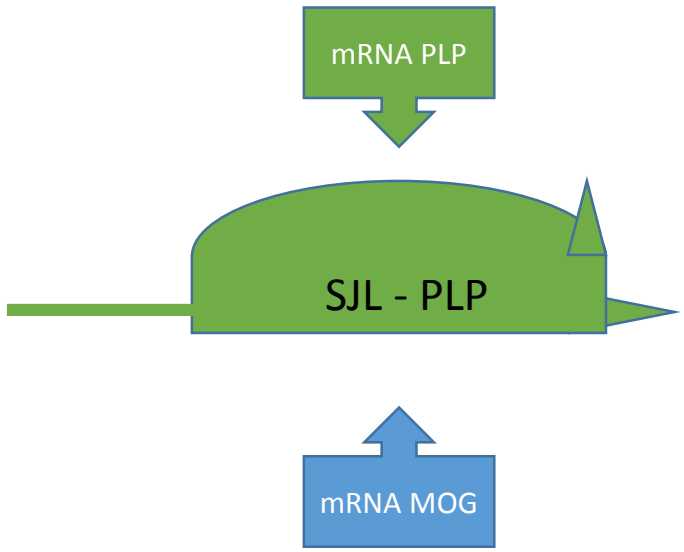
Characterization of T cells induced by mRNA Prevention – D16

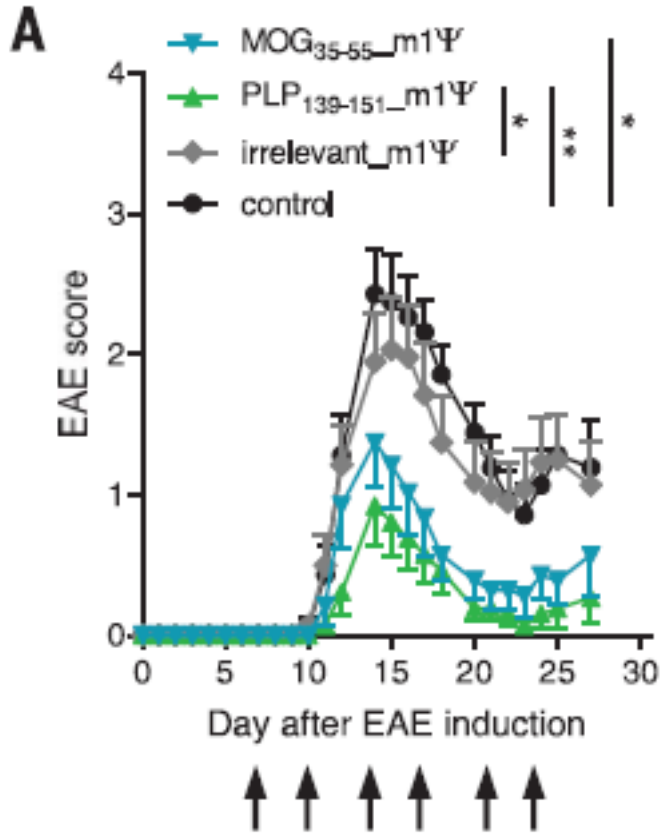


Characterization of T cells induced by mRNA Prevention – D16

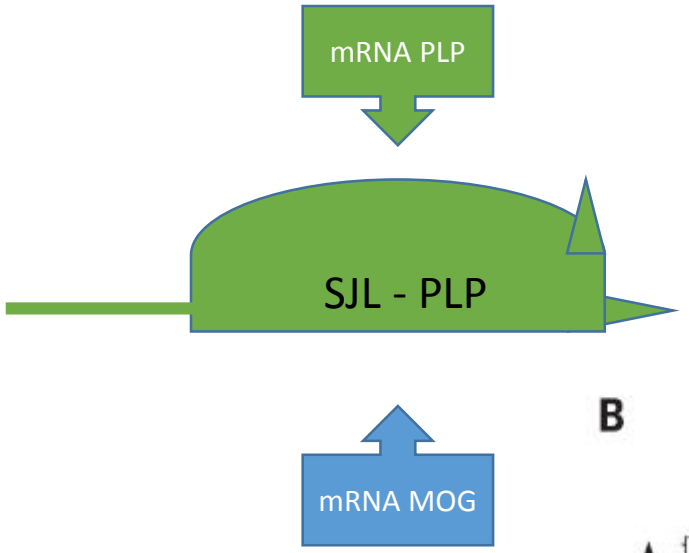


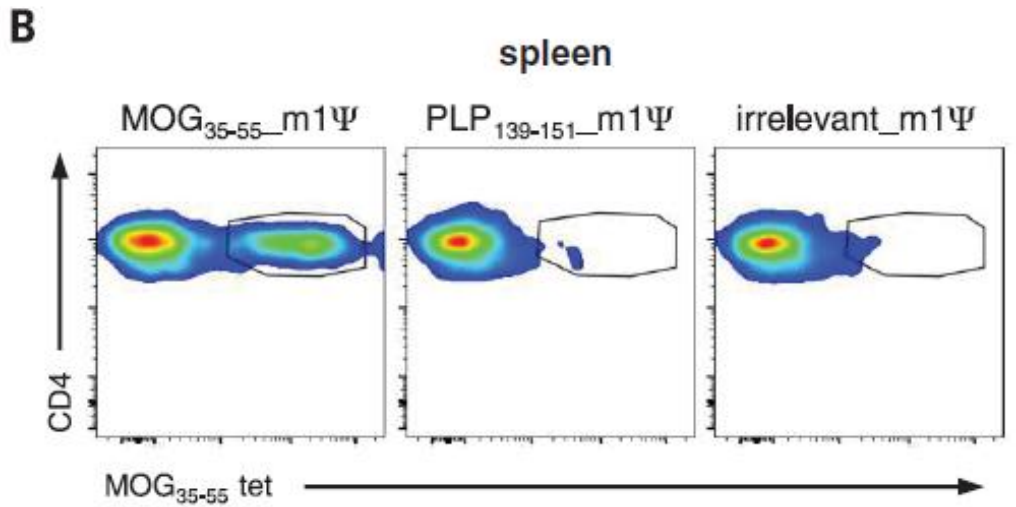
Induction of bystander tolerance

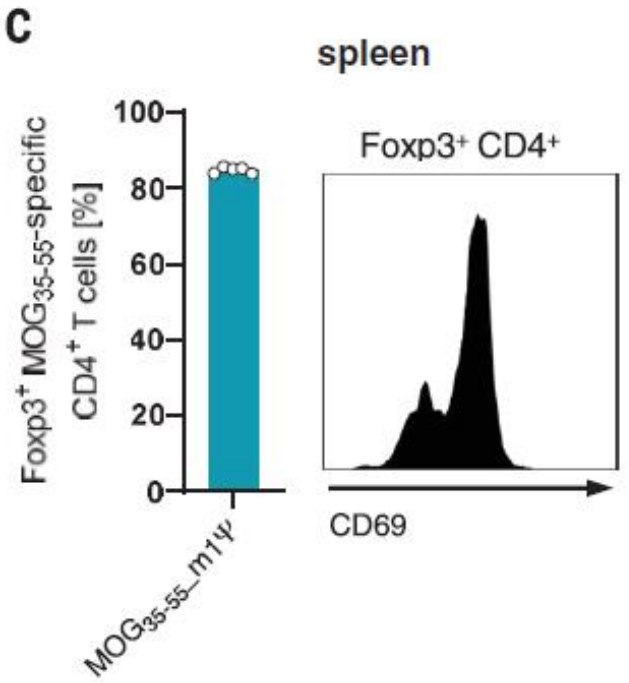




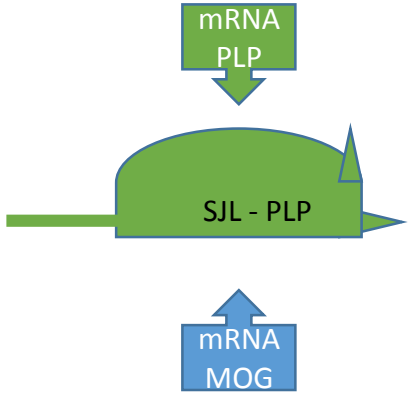
Induction of bystander tolerance

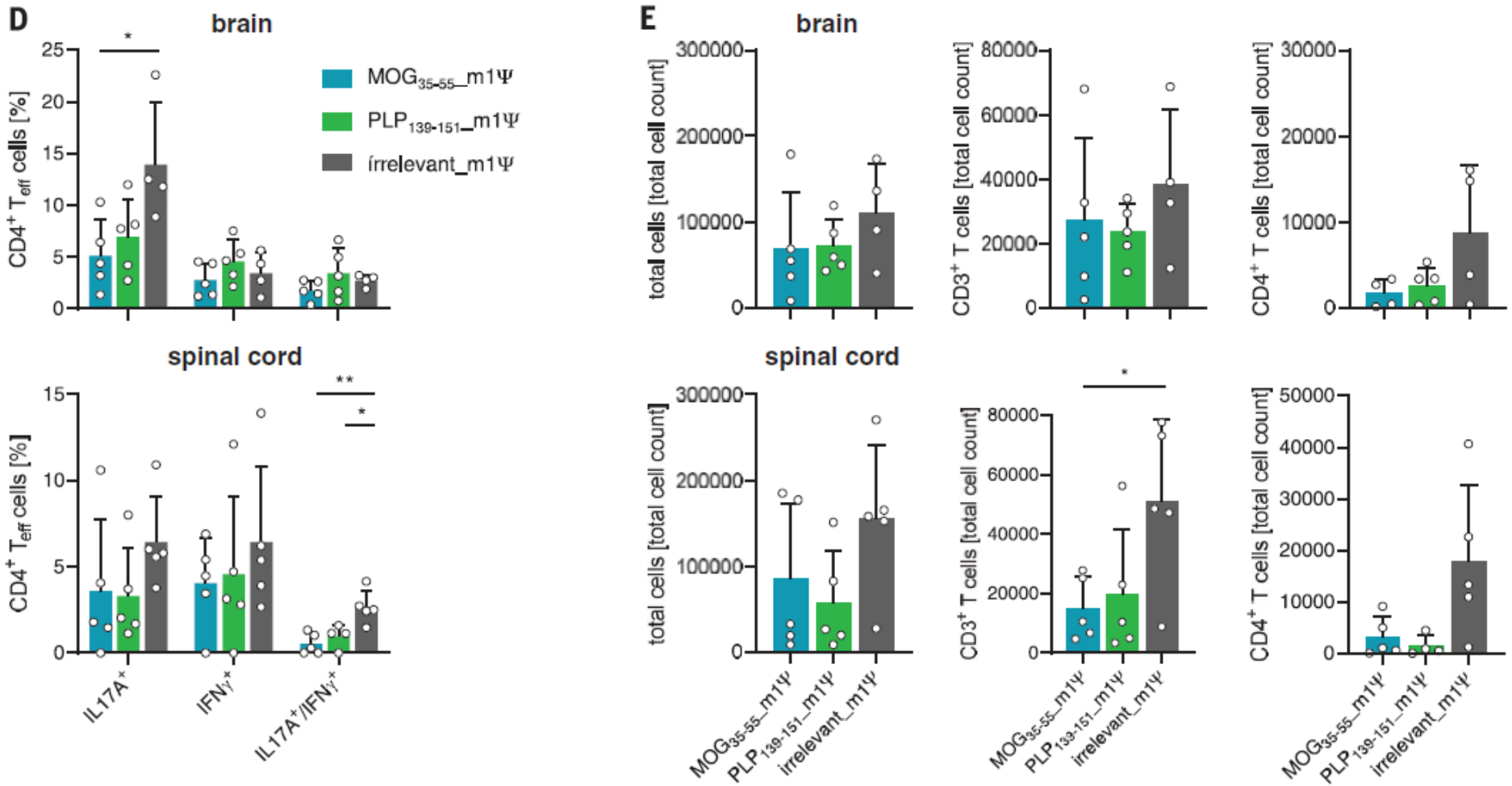




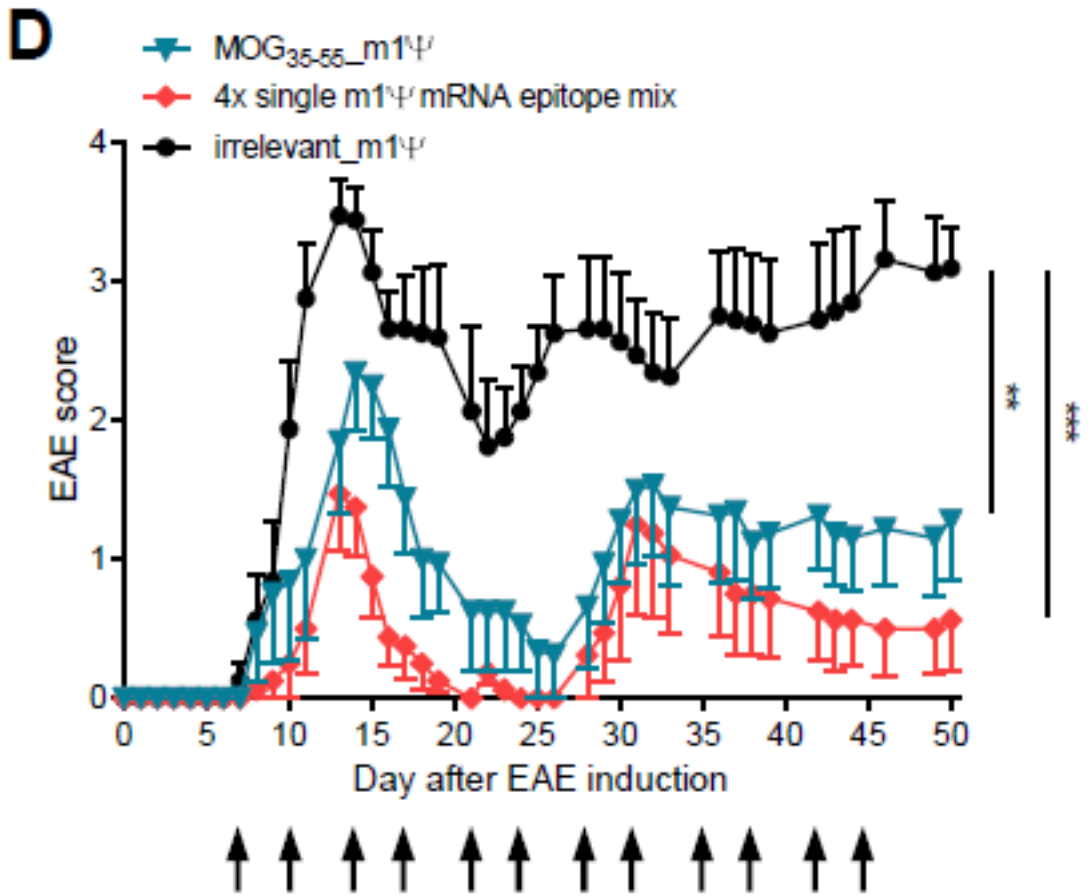


Induction of bystander tolerance

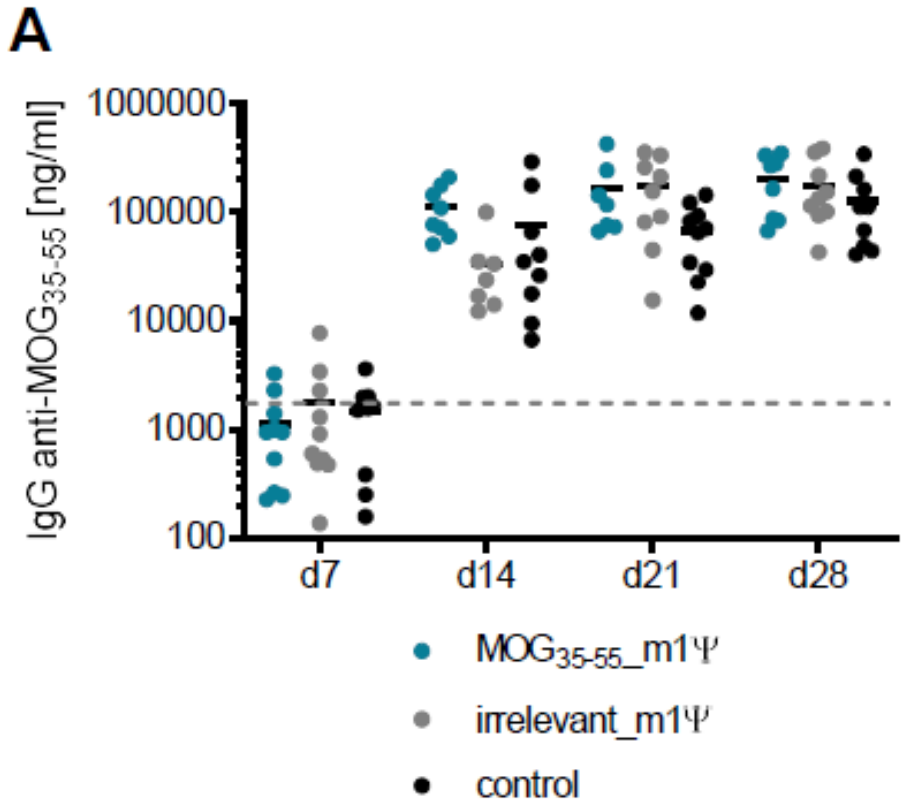




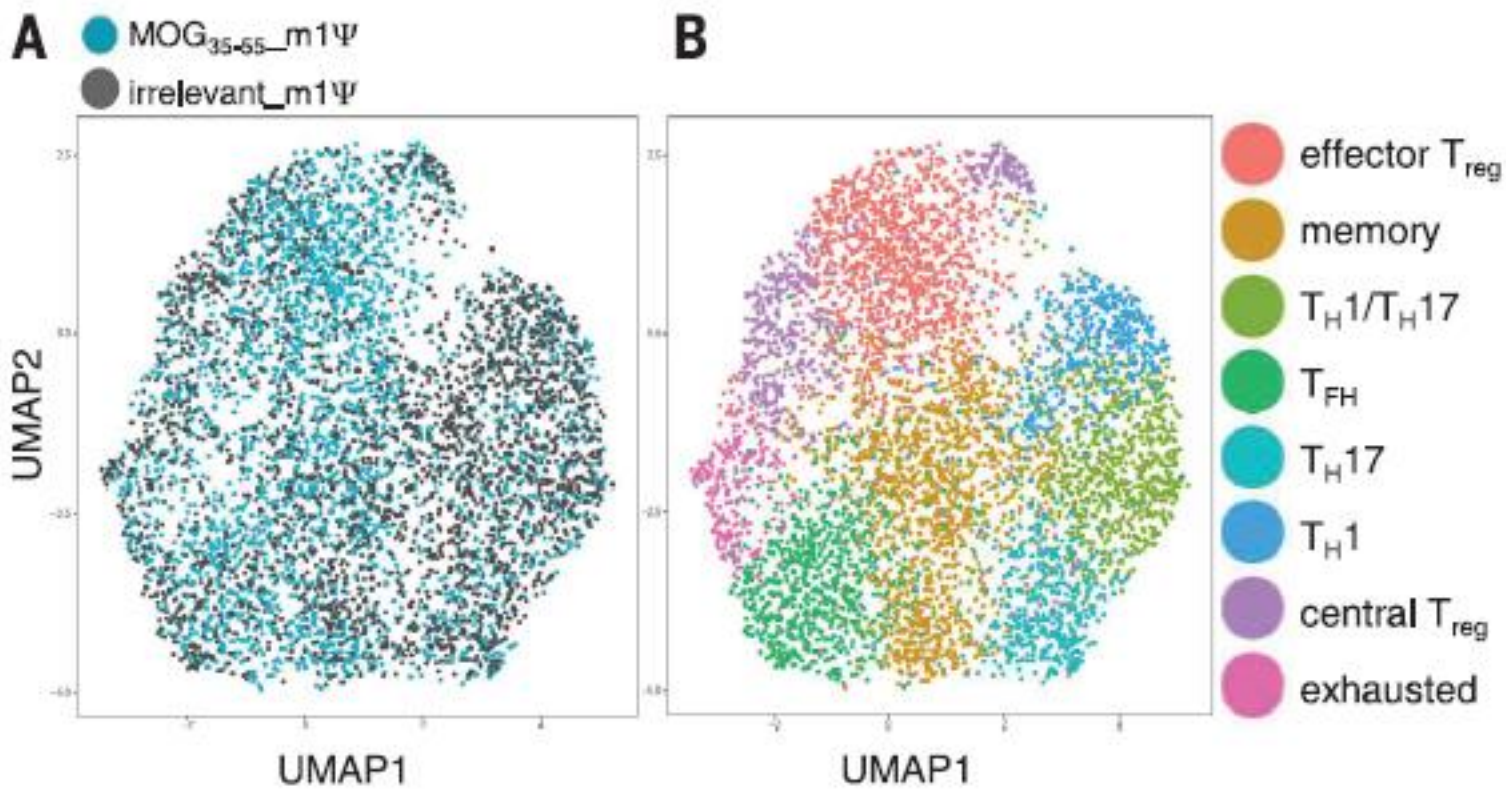
Impact on polyclonal autoimmune disease driven



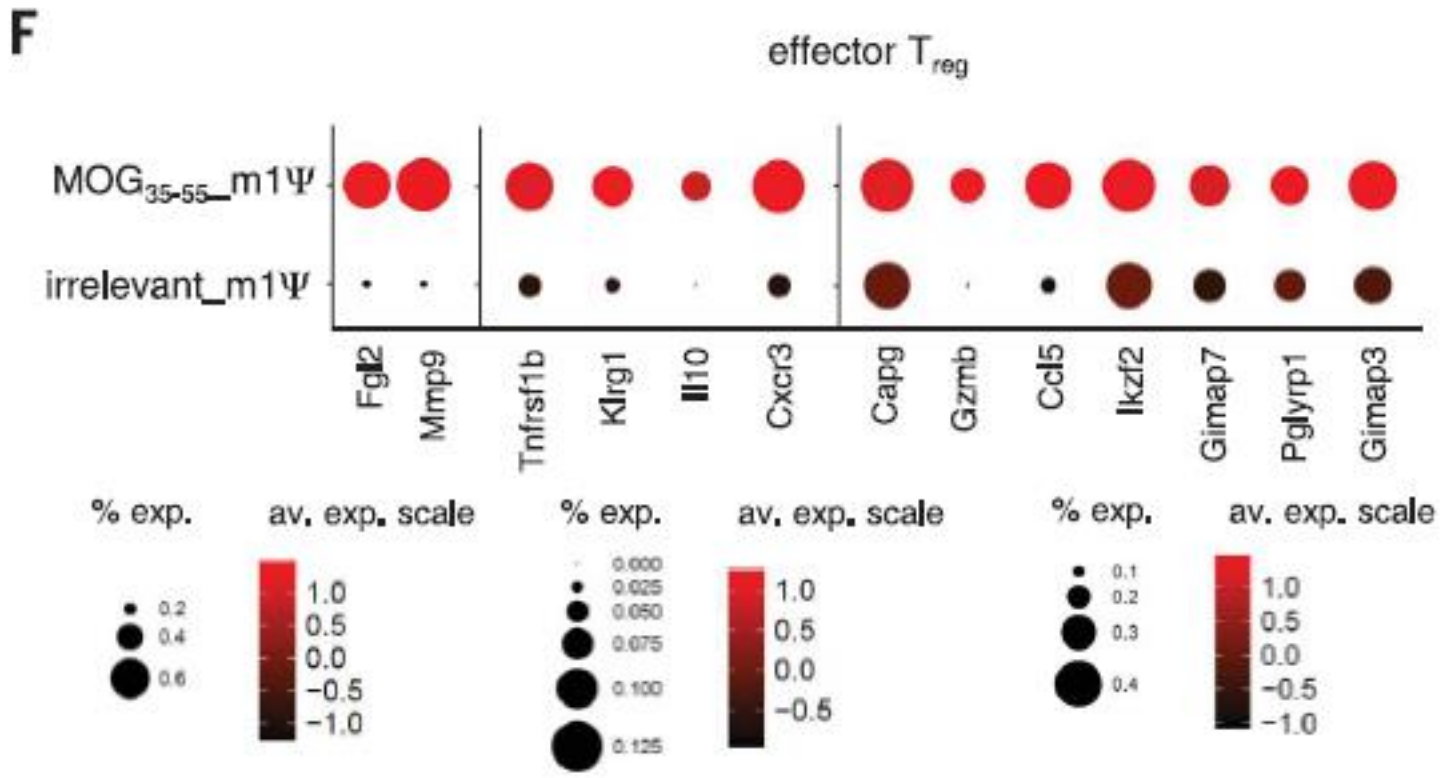
Absence of autoAg-specific Ab response



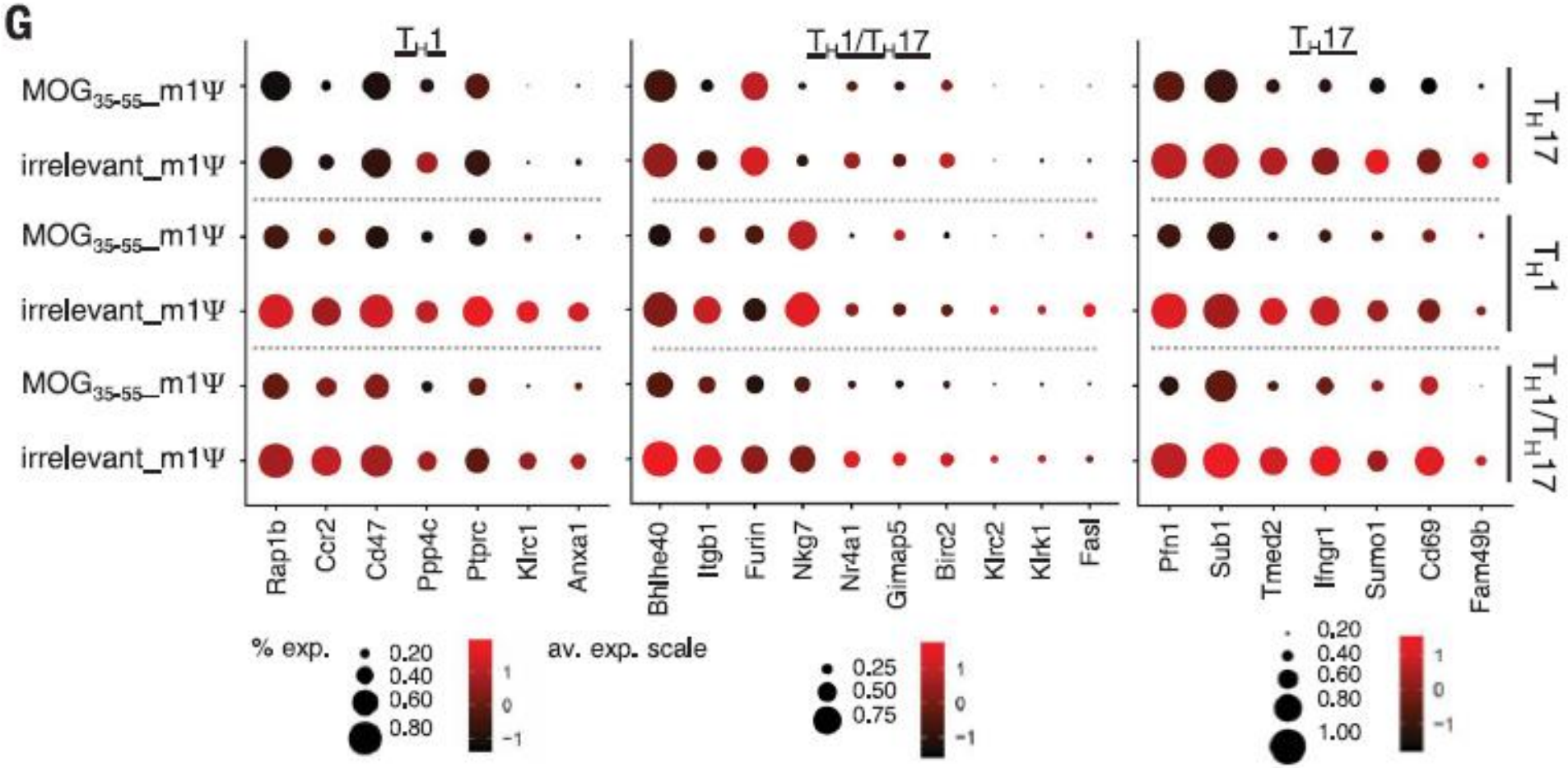
Phenotypic characteriztion – single cell RNAseq



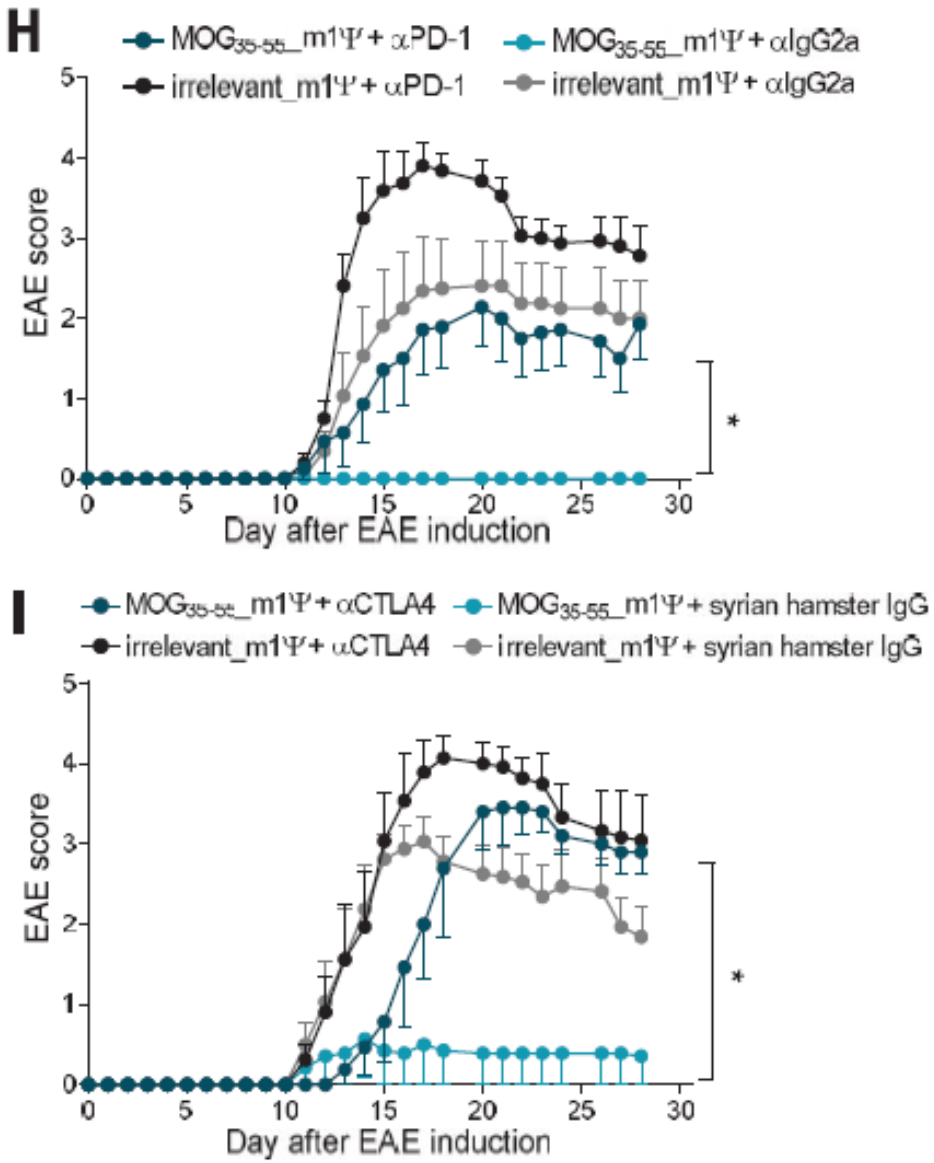
Up-regulation of genes involved in suppressive functions of Treg:
TNFR2, KLRG1, IL10, GrB…



Down-regulation of genes involved in migration (ccr2, Pap1b), cytokine prod (Bhlhee40) functions (Cd69) of Teff



Role of CTLA4 and PD1 axis



Sum-up: mRNA vaccine in AID!

- What is new?
  - mRNA vaccine in AID
  - m1Ψ and abrogation of TLR7 stimulation
  - Bystander tolerance
  - Treg induction

- Applications?
  - Identification of Auto-Ag
  - Long term efficacy?