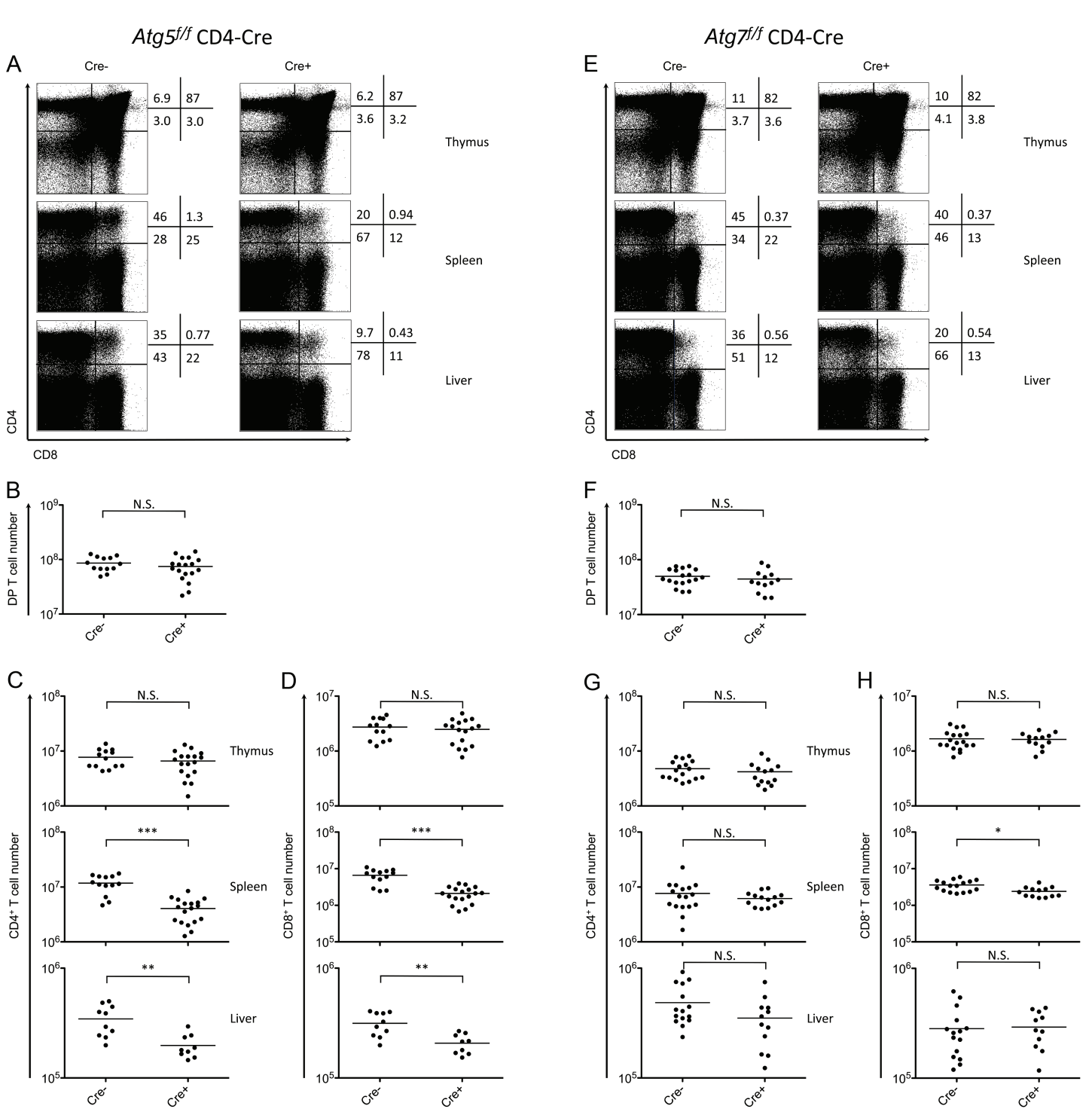
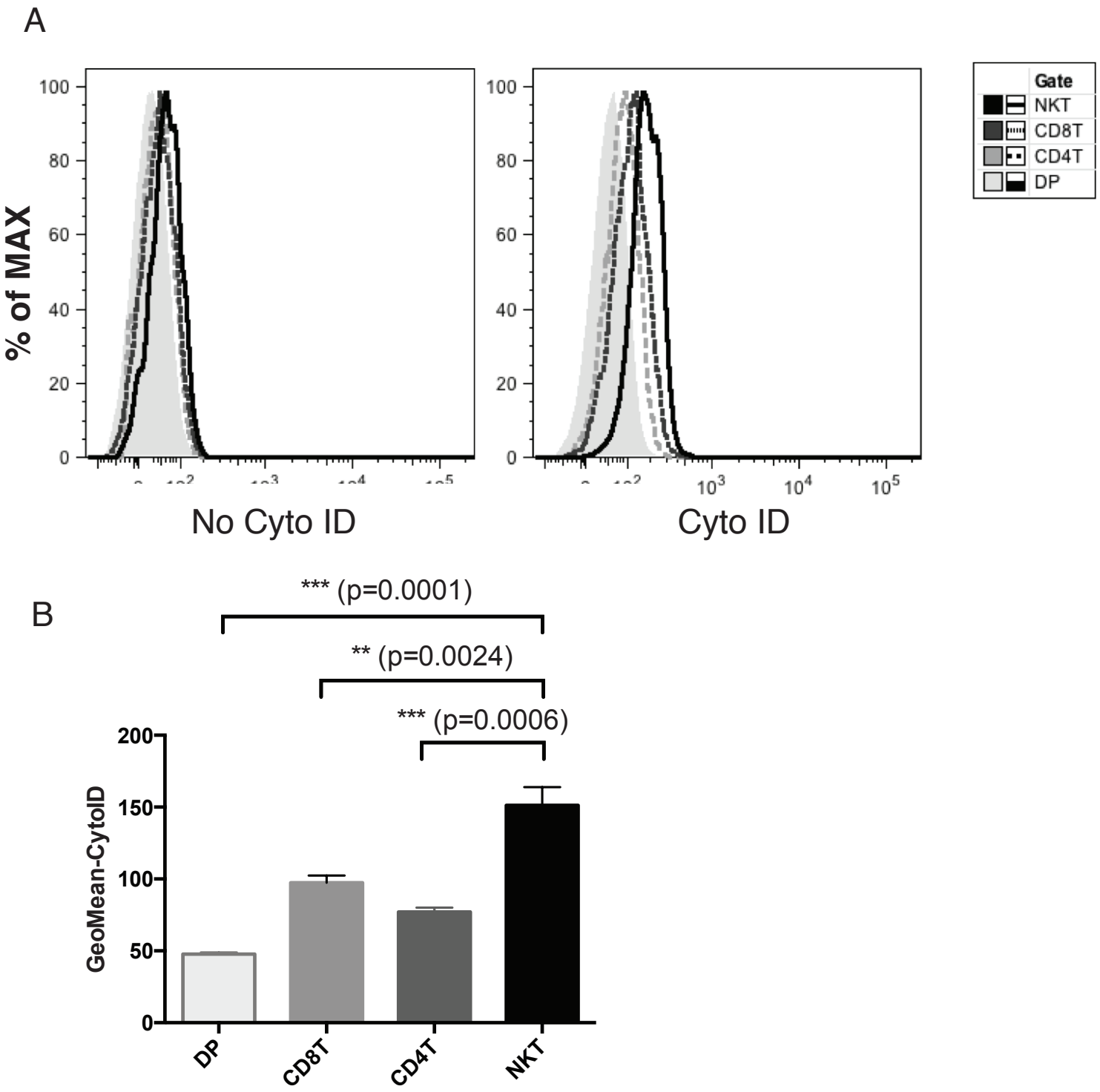
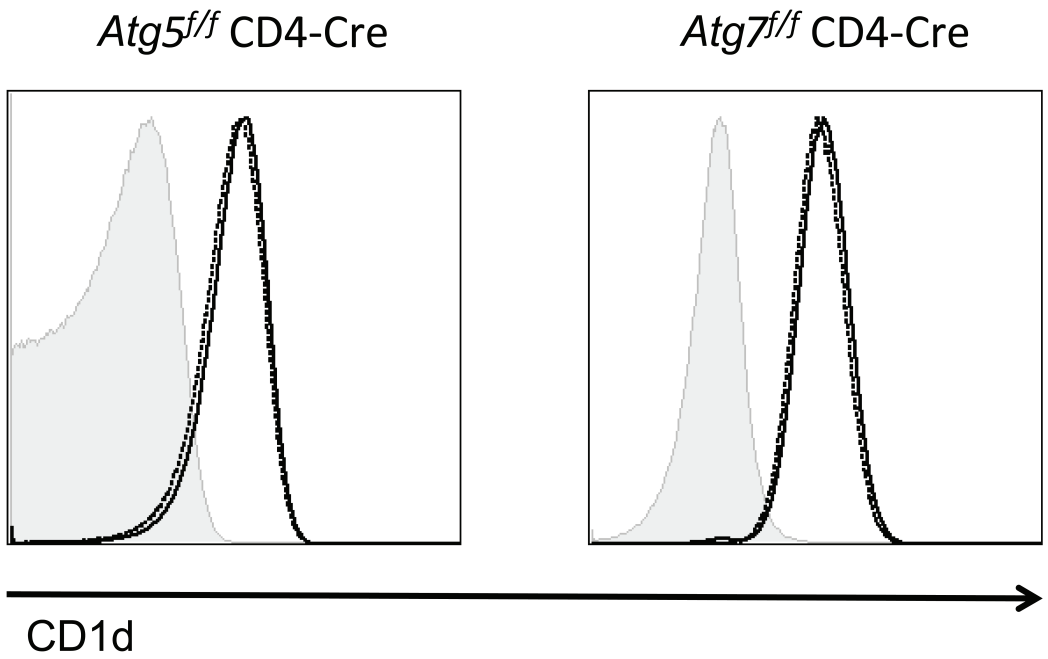


Supplemental figure 1. Similar cellularity in thymus and marginally decreased peripheral conventional T cells in CD4-Cre mice devoid of either Atg5 or Atg7. Eight-to-nine-week old mice (A-D, Atg5f/f CD4-Cre; E-H, Atg7f/f CD4-Cre) and controls lacking the Cre transgene were analyzed for their CD4 T cells and CD8 T cells in indicated organs. Both population profiles (A and E) and absolute cell numbers (B and F, DP thymocytes; C and G, CD4 T cells; D and H, CD8 T cells) are shown here. Representative flow cytometry plots are from at least three independent experiments.
N.S., not significant ($p>0.05$), *$p<0.05$, **$p<0.005$, ***$p<0.0001$, $n\geq9$.



Supplemental figure 2. iNKT cells display the highest CytoID staining in thymus.
(A) Thymycytes from WT C57BL6 mice were stained using CytoID autophage detection kit (Enzo Life Science). As a control, thymocytes were stained with the same antibodies except the CytoID dye (A. left panel). Histograms are representative of two experiments.
(B) Summary of the Geometric Mean Fluorescence Intensity of the CytoID dye for each cell type. Unpaired T test with equal standard deviation was used to calculate statistical significance.



Supplemental figure 3. CD1d expression on DP thymocytes is not reduced in Atg5 or Atg7 deficient mice. Cell surface CD1d expression was determined on DP thymocytes derived from Atg5f/f CD4-Cre (left) or Atg7f/f CD4-Cre (right) mice and Cre-negative controls. Representative flow cytometry analyses from four independent experiments are shown. Filled histogram: isotype control; solid line: wild type control; dotted line: Atg5 or Atg7 KO thymocytes.

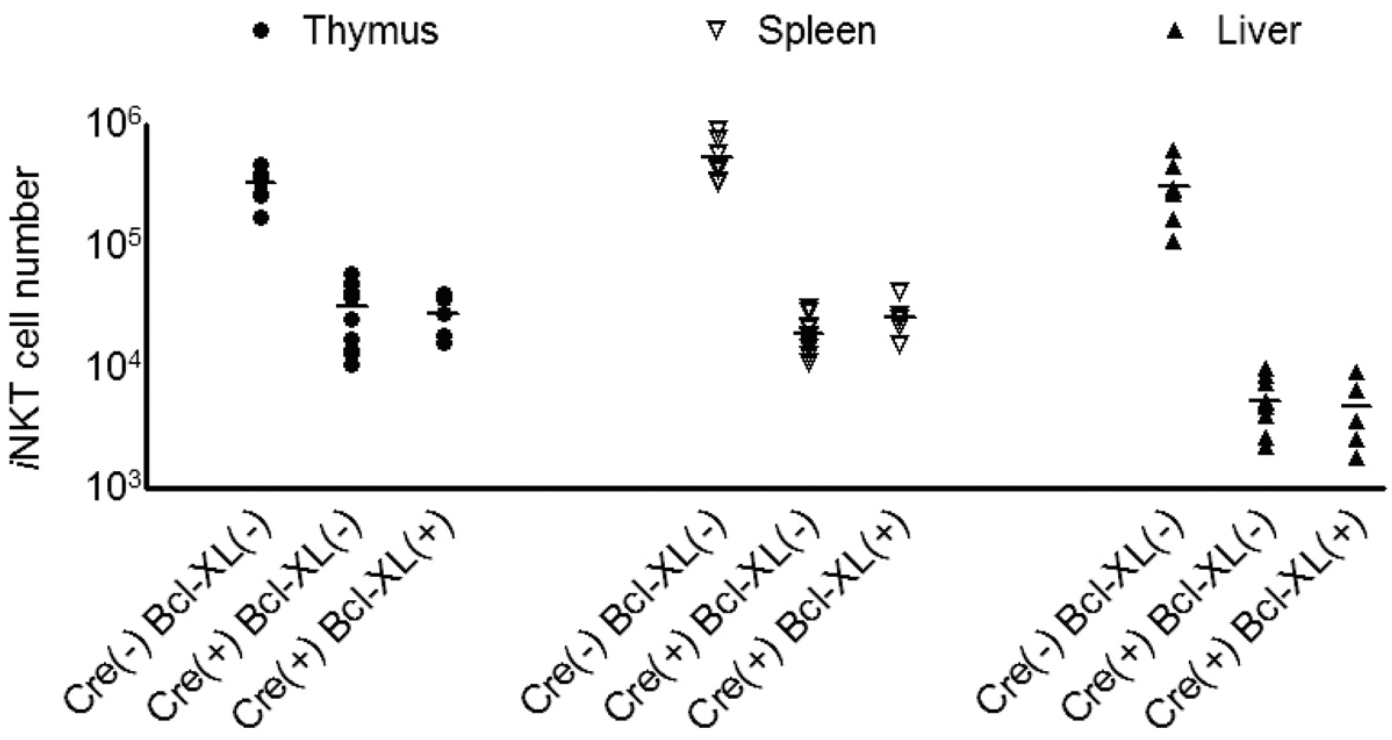


Figure 4. Overexpression of Bcl-XL did not rescue the reduced iNKT cells in Atg5 deficient mice. Thymic, splenic and liver iNKT cells were analyzed from eight-to-nine-week old mice with a CD4-Cre mediated deletion of Atg5, overexpressed Bcl-XL and controls. Shown here are the absolute cell numbers of iNKT cells. $n \geq 4$.