Supplemental Figure legends

Figure. S1. CD4 deficiency prevents ADM/PanIN lesions progression over time. (A) Immunohistochemistry for p-ERK1/2, and Periodic Acid Schiff staining (inset); (B) Gomori Trichrome staining and (C) immunohistochemistry for SMA in iKras* and iKras*;CD4$^{-/-}$ pancreata 1 week, 3 weeks, 8 weeks and 17 weeks post pancreatitis induction. Scale bar 50μm.

Figure. S2. PanIN cells in CD4-deficient mice undergo apoptosis. (A) Cleaved caspase 3 immunohistochemistry staining and (B) TUNEL staining in iKras* and iKras*;CD4$^{-/-}$ pancreata 1 week, 3 weeks, 8 weeks and 17 weeks following pancreatitis. Scale bar 25μm.

Figure. S3. The process of tissue repair following pancreatitis induction is delayed in CD4$^{-/-}$ mice. (A) H&E and (B) CK19 immunohistochemistry staining of WT and CD4$^{-/-}$ pancreata at 0, 1 day, 1 week and 2 weeks following pancreatitis induction. Scale bar 50μm. Pancreatic immune cell infiltrates were measured by flow cytometry to determine the percentage of (C) CD3^{+}CD4^{+} T cells and CD3^{+}CD4^{+} FoxP3^{+} Treg cells, (D) CD45^{+} leukocytes, (E) CD3^{+}CD8^{+} T cells. Data represent mean ± SEM, each point indicates one animal. The statistical difference between WT and CD4$^{-/-}$ mice was determined by One-tailed Student's *t*-tests.*p<0.05, **p<0.01, ***p<0.001, ****p<0.0001.

Figure. S4. Cytokine expression is altered in CD4-deficient iKras* mice. (A) RT-qPCR for transgenic *Kras**, *GM-CSF*, *Il1β*, *Il2*, *Il4*, *Il6*, *Il10*, *Il11*, *Il17* and *Il23p19* expression at 1 day following pancreatitis induction. (B) RT-qPCR for transgenic *Kras**, *GM-CSF*, *Il1β*, *Il2*, *Il4*, *Il6*, *Il10*, *Il11* and *Il17* expression in control, iKras* and iKras*;CD4$^{-/-}$ pancreata 3

weeks, 8 weeks and 17 weeks following pancreatitis. Data represent mean ± SEM, each point indicates one animal. The statistical difference between iKras* and iKras*;CD4$^{-/-}$ mice at the same time point was determined by Student's *t*-tests.*p<0.05, **p<0.01, ****p<0.0001.