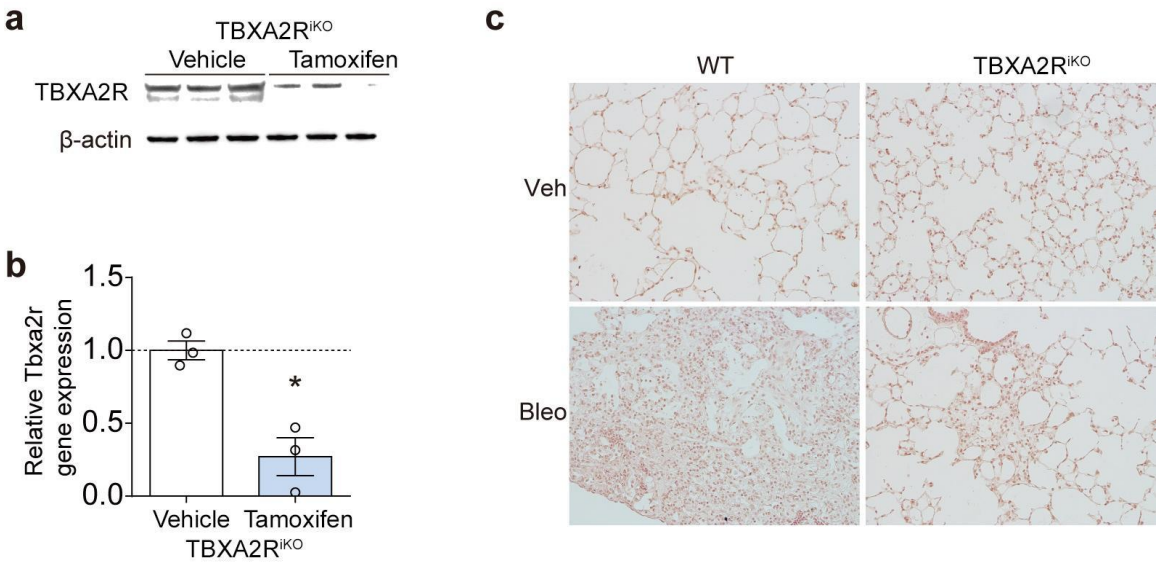
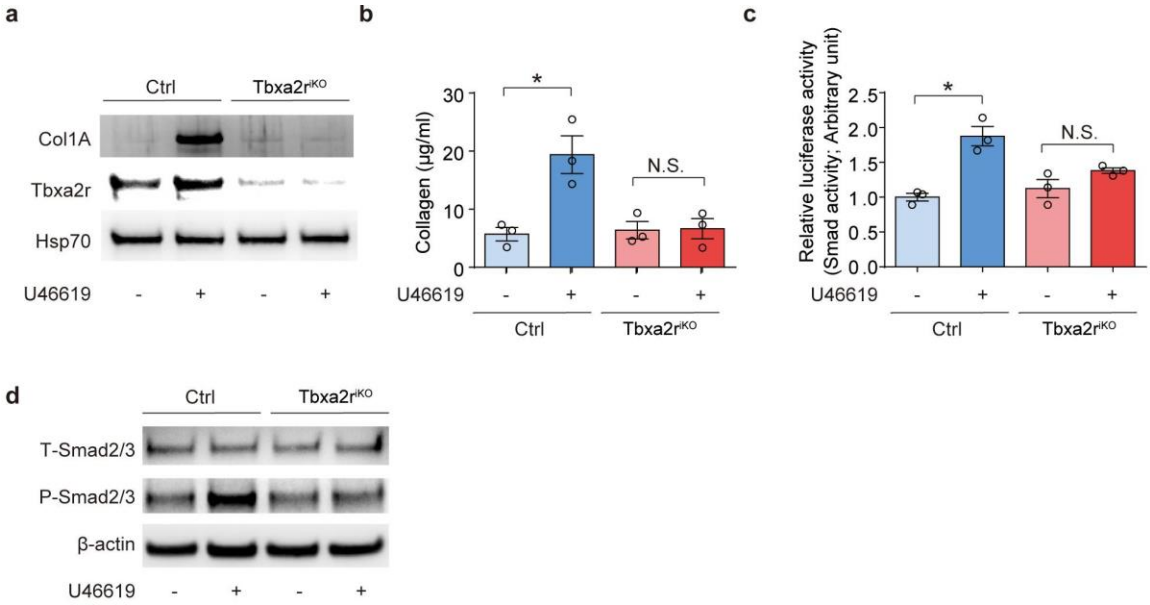
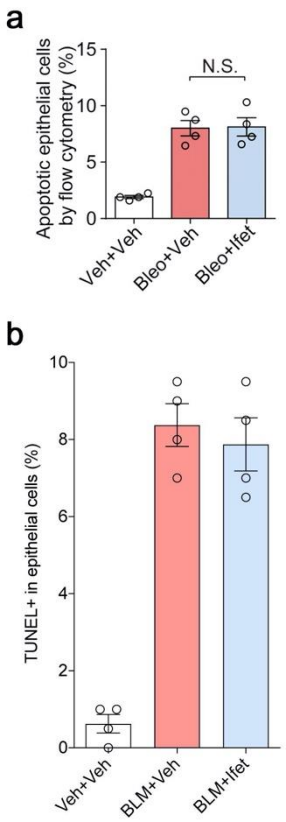


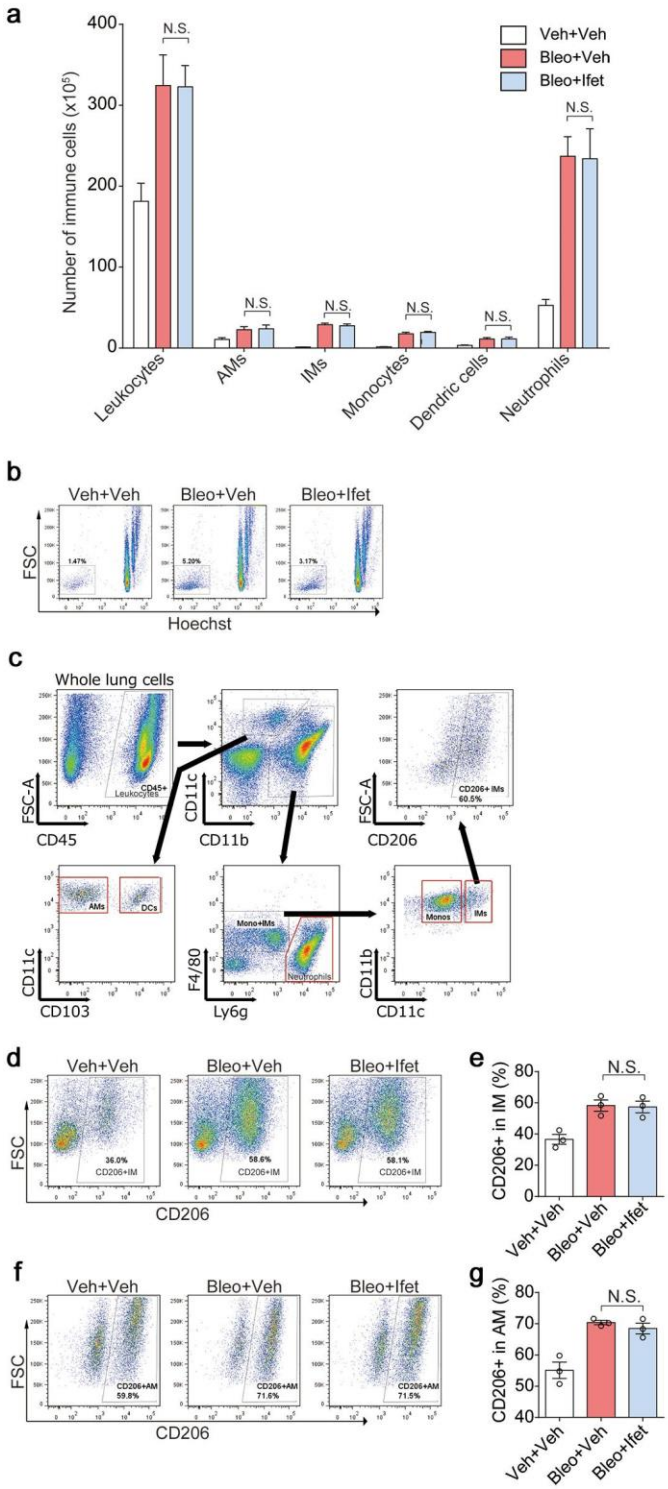
Extended Figure 1: Efficient *TBXA2R* gene deletion in TBXA2R^{iKO} mice. (A) Western blot for TBXA2R in TBXA2R^{iKO} mice, before and after induction by tamoxifen treatment. **(B)** Quantification of (A). Significance by unpaired t-test (*=p<0.05) **(C)** Representative images from TBXA2R^{iKO} and WT mice (quantified in Figure 1).



Extended Figure 2:Specific TBXA2R agonist U-46619 treatment recapitulates the effects F2-Isoprostanes on fibroblasts. (A) Western blot quantifying Col1a expression following specific TBXA2R agonist U-46619 stimulation of control and TBXA2R deficient fibroblasts. **(B)** Quantification of multiple trials of (A). **(C)** Quantification of Smad reporter activity (indicating canonical Tgf-β activity) in WT and TBXA2R deficient fibroblasts following U-46619 stimulation. (D) Western blot demonstrating U-46619 induced Smad2/3 phosphorylation in WT fibroblasts and in cells lacking TBXA2R. Error bars are SEM; *p<0.05 for comparison by two-way ANOVA with Tukey's HSD.



Extended Figure 3: Epithelial apoptosis is not affected by TBXA2R antagonism A) Apoptosis of lung epithelial cells as determined by the percentage of epithelial cells (CD326+/CD31-/CD45- cells) unstained by Hoechst dye (apoptotic epithelial cells). **B)** Percentage of cells that co-stain for TUNEL and pan-cytokeratin on lung sections compared to total pan-cytokeratin positive cells (200 total CK+ cells were counted per group).



Extended Figure 4: TBXA2R antagonism does not impact inflammatory cell recruitment. **A)** Flow cytometric evaluation of inflammatory/immune cells in the lungs: lymphocytes, alveolar macrophages (AMs), interstitial macrophages (IMs), monocytes, dendritic cells, and neutrophils. N = 3-4 per group. For all quantitative figure elements, data are presented as means ± SEM, with individual data points overlaid as circles.

Statistics were performed by ANOVA, followed by Tukey's HSD for comparisons between individual groups. **(B)** Quantification of epithelial cell apoptosis by flow-cytometry. **(C)** Sorting schema to identify different cell populations in lung single cell suspension. **(D)** Representative image demonstrating gates used for quantification of interstitial macrophages **(E)** Quantification of three trials of (D). Error bars are SEM; significance determined by ANOVA with Tukey's HSD. **(F)** Gating strategy for quantification of alveolar macrophages. **(G)** Quantification of three trials of (F). Error bars are SEM; significance determined by ANOVA with Tukey's HSD.