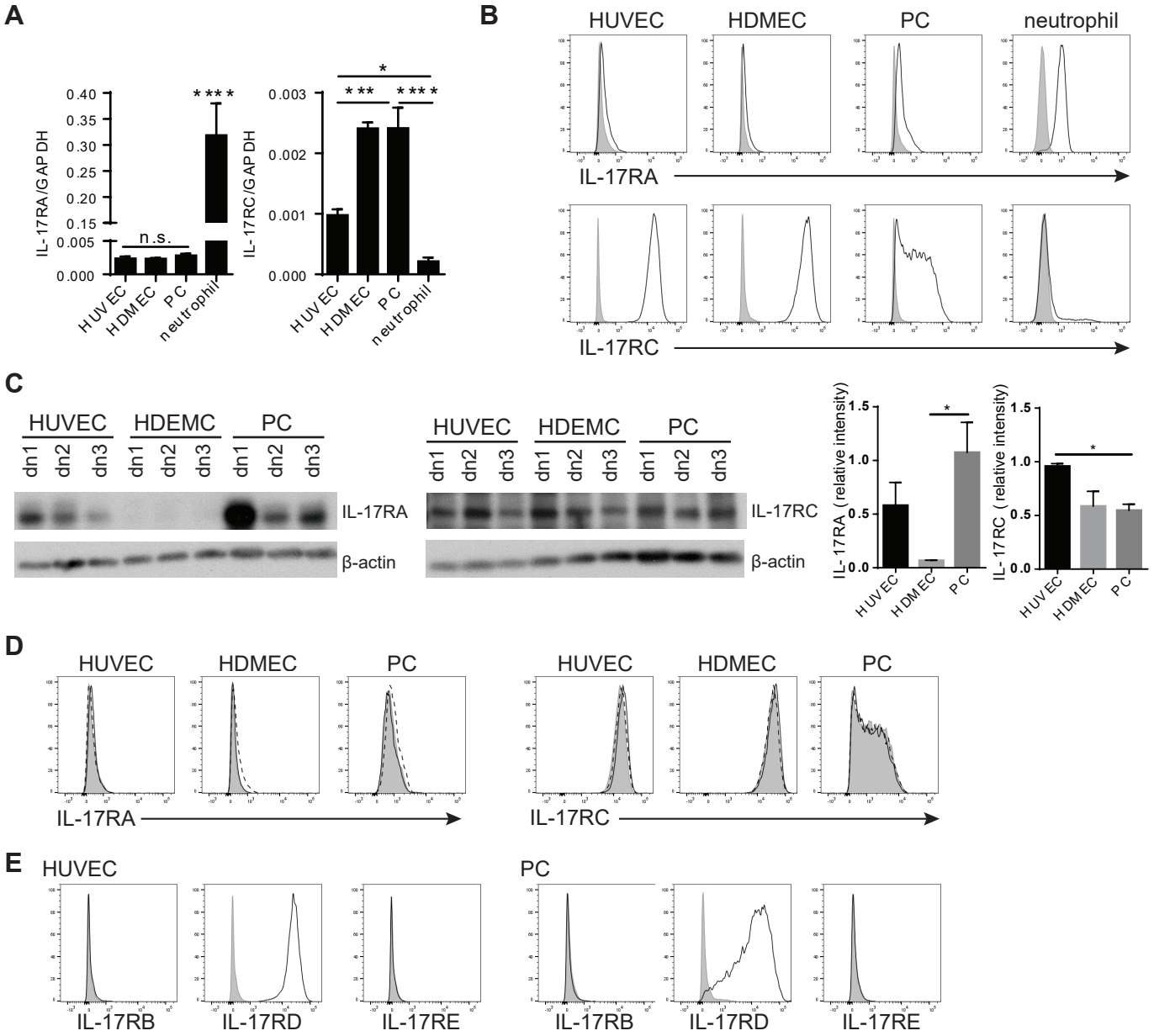
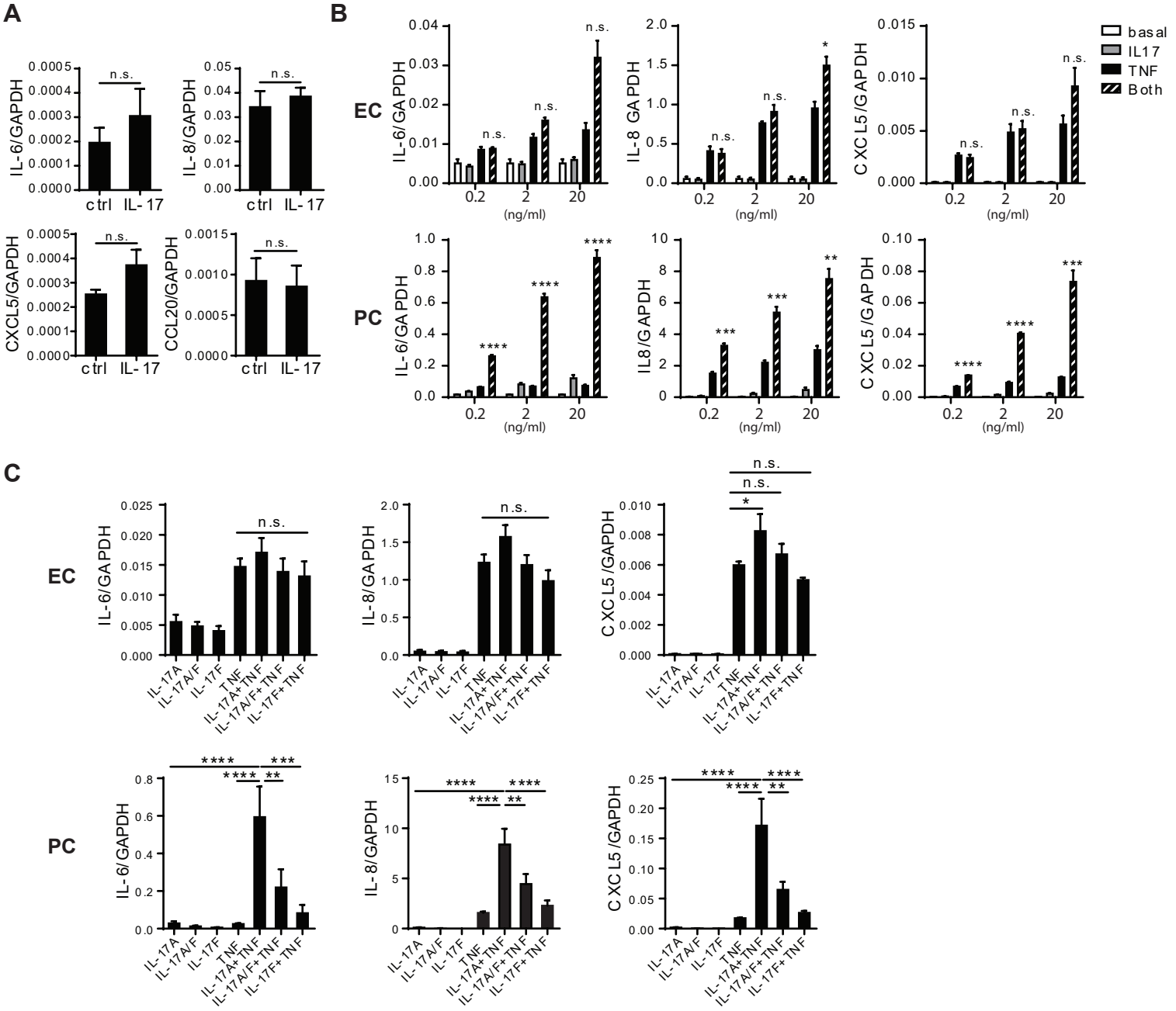
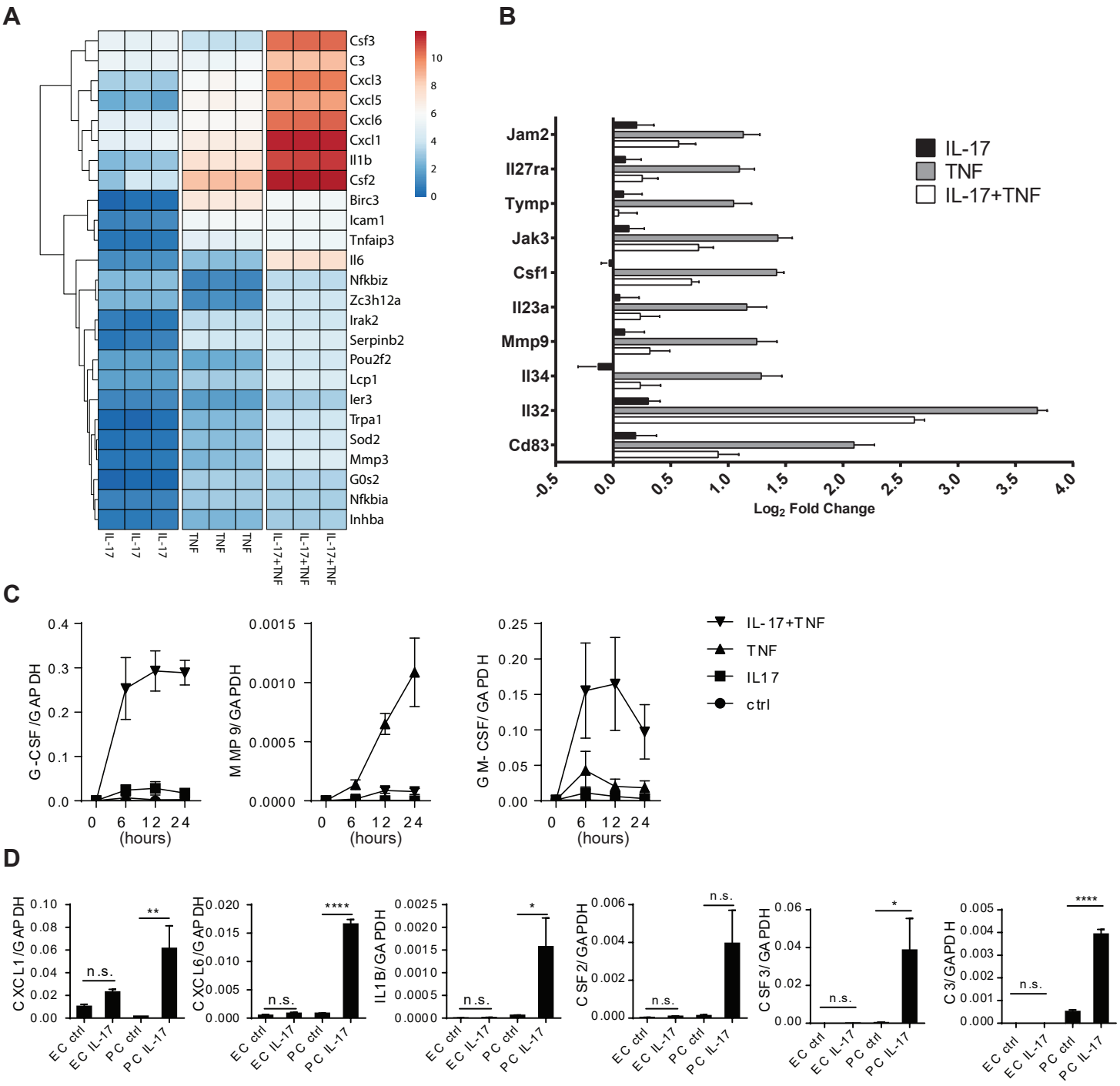


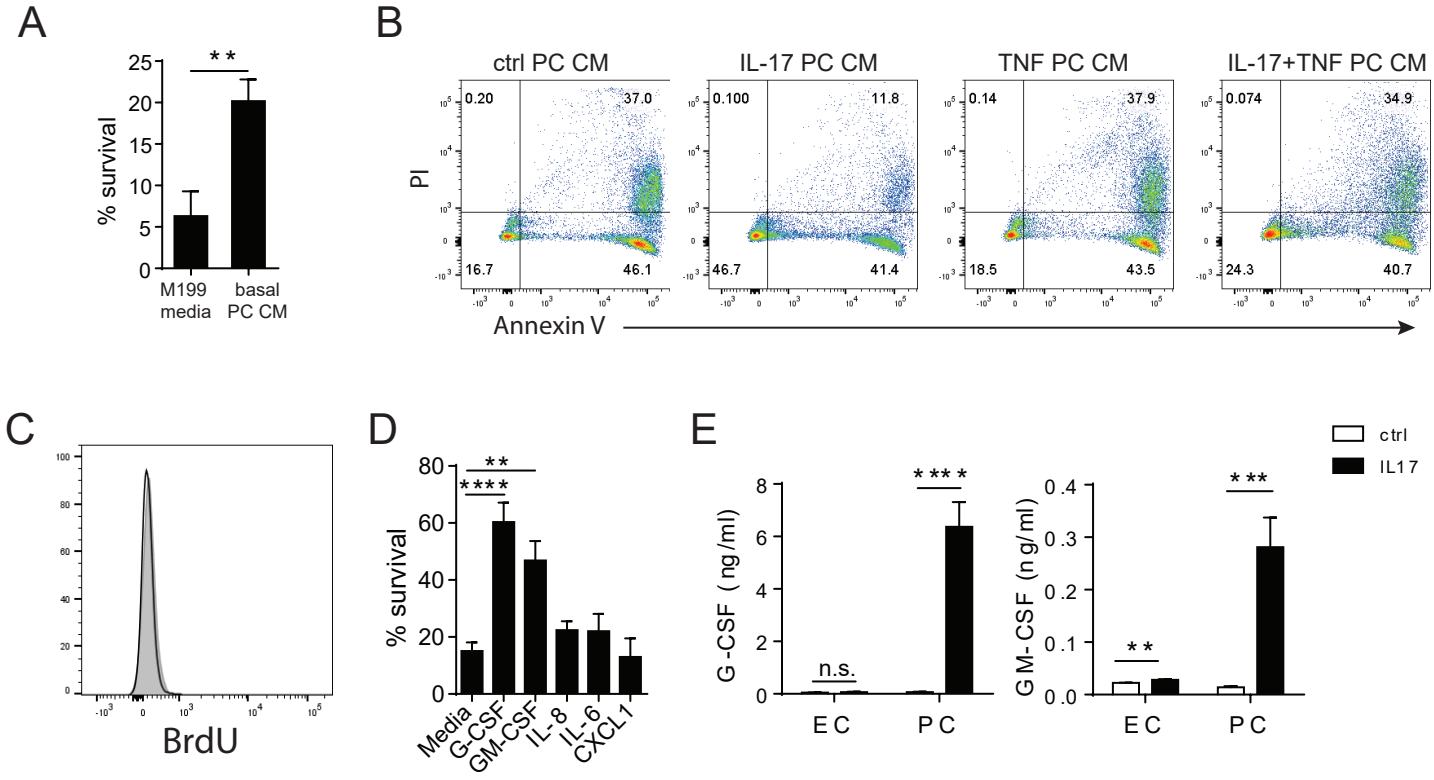

**Supplemental Figure 1. IL-17 receptor expression varies among different cell types**. (A) qRT-PCR analysis of IL-17RA and IL-17RC transcript expression in HUVECs, HDMECs, PCs, or neutrophils [n=3-4, one-way ANOVA with Tukey's multiple comparisons test, SEM]. (B) The level of IL-17RA and IL-17RC protein expressed by HUVECs, HDMECs, PCs, or neutrophils assessed by flow cytometry. Isotype controls are shown in gray, and stained samples are outlined in black. (C) Western blot analysis of IL-17RA and IL-17RC expressed in HUVECs, HDMECs, or PCs. Densitometry was performed using Image J in which the intensity of the IL-17R bands were normalized to β-actin [n=3, one-way ANOVA, SEM, dn: donor]. (D) IL-17RA and IL-17RC expression by HUVECs, HDMECs, and PCs after stimulation with 20ng/ml of TNF (solid line) or 50ng/ml of IFN-γ (dash line) for 24 h; unstimulated controls are shown in gray. (E) The level of IL-17RB, IL-17RD, and IL-17RE protein expressed by HUVECs or PCs assessed by flow cytometry. Isotype controls are shown in gray, and stained samples are outlined in black. Representative results from three different donors of each cell type are shown. *$p<0.05$, ***$p<0.001$, ****$p<0.0001$.




**Supplemental Figure 2. (A) HDMECs are refractory to IL-17 stimulation.** The level of IL-6, IL-8, CXCL5, and CCL20 mRNA production by HDMECs after stimulation with 20ng/mL of recombinant human IL-17 for 24 h assessed by qRT-PCR. Supernatant produced from these cells was also analyzed by ELISA for production of IL-6 and IL-8 protein. Consistent with the qRT-PCR analysis, HDMECs do not produce IL-6 nor IL-8 (below detection limit of the assay) after IL-17 stimulation. [n=3, t-test, SEM]. **(B) Suboptimal concentrations of IL-17 and TNF synergistically upregulate pro-inflammatory gene expression in PCs, but not in ECs.** Production of IL-6, IL-8, and CXCL5 transcripts by HUVECs and PCs after stimulation with 0.2ng/ml, 2ng/ml, or 20ng/mL of recombinant human IL-17 (gray), TNF (black), or IL-17+TNF (striped) for 6h. To determine the presence of synergistic interactions, transcript levels from IL-17+TNF conditions were compared to the sum of the transcript levels from IL-17 alone and TNF alone [n=3-4, t-test, SEM]. **(C) TNF and IL-17A elicit a stronger pro-inflammatory response in PCs than TNF combined with IL-17A/F or IL-17F.** The production of IL-6, IL-8, and CXCL5 mRNA by HUVECs or PCs after stimulation with IL-17 cytokines, TNF, or both (20ng/mL for each cytokine) for 12 h [n=3, one-way ANOVA and Tukey's multiple comparisons test, SEM]. *p<0.05, **p<0.01, ***p<0.001, ****p<0.0001.




**Supplemental Figure 3. RNAseq shows inflammatory gene modulation in PCs.** (A) Heat map visualization of the IL-17-, TNF-, and IL-17+TNF-activated PC gene signatures. (B) Relevant examples of TNF-induced genes that are attenuated by co-stimulation of IL-17. (C) qRT-PCR verification of selected candidate genes from the RNAseq analysis of cytokine-stimulated PCs. (D) Comparisons of the transcript levels of selected genes from the RNAseq analysis in IL-17-stimulated ECs versus PCs [n=4-6, one-way ANOVA and Tukey's multiple comparisons test, SEM]. *p<0.05, **p<0.01, ****p<0.0001.




**Supplemental Figure 4. Neutrophil survival is prolonged by IL-17-activated PC paracrine signals.** (A) Neutrophil survival in control M199 media or basal PC CM at 48 h [n=5, t-test, SEM]. (B) Representative flow cytometry plots showing Annexin V and PI staining of neutrophils cultured in the indicated CM after 48 hours [n=8]. (C) BrdU labeling of neutrophils cultured in control PC CM (shown in gray) or IL-17-stimulated PC CM (outlined in black). (D) Neutrophil survival in M199 media with the addition of the indicated recombinant proteins (20ng/ml) at 24 h [n=3, one-way ANOVA, SEM]. (E) The level of G-CSF and GM-CSF secretion by HUVECs or PCs after 24 h of IL-17 treatment (20ng/ml) [n=6-8, t-test, SEM]. **p<0.01, ***p<0.001, ****p<0.0001.