



**Supplemental Figure 10. Senescent mouse mammary fibroblasts (MMFs) induced *in vitro* resemble senescent CAFs (senCAF) in MMTV-PyMT tumors. (A)** Gene set enrichment analyses of senCAF compared to non-senescent myCAF (myCAF) showed enrichment of collagen synthesis and modification. **(B)** Gene set enrichment analyses of Doxorubicin-induced senescent mouse mammary fibroblasts (Sen) compared to vehicle-treated mouse mammary fibroblasts (Ctrl) showed enrichment of Fridman senescence and **(C)** enrichment of collagen synthesis and modification. Normalized Enrichment Score (NES), p-value, and False Discovery Rate (FDR) are shown in each plot. **(D)** Heat map comparing senCAF to myCAF shows increased expressions of selected SASP factors, particularly collagens. **(E)** Heat map comparing *in vitro* derived Sen versus Ctrl MMFs shows increased expression of selected SASP factors, particularly collagens. **(F)** 200,000 EO771 breast cancer cells labeled with luciferase were co-injected with 100,000 control (Ctrl) or senescent (Sen) MMFs and tumor growth was monitored by live animal bioluminescence imaging (BLI). Representative BLI of day 9 post tumor injection is shown. **(G)** Tumor growth was assessed by BLI on indicated time points (2-way ANOVA was performed to compare the tumor growth; data are represented as mean  $\pm$  SEM. \*\*p<0.01).