



Supplemental Figure 2. MMTV-PyMT tumors consist of complex cell types reminiscent of triple negative breast cancer. (A) Single cells were obtained from 12-week-old MMTV-PyMT mice and subject to single cell RNA-Seq. Uniform Manifold Approximation and Projection (UMAP) of total cells from is displayed and tumor cells are within the box. (n=2). **(B)** Feature plots from **A** showing tumor cells as evidenced by expression of *Krt8*, *18*, *14*, and *17*. **(C)** Feature plots from **A** showing *Cdkn2a* (p16) and *Cdkn2b* (p15) expressions are primarily limited to stromal cells whereas tumor cells are mostly negative for the two markers. **(D)** Feature plots showing the expressions of typical cancer associated fibroblasts markers (*Pdgfrb*, *Pdprn*, *Fap*, and *S100a4*) in stromal cells. **(E)** Violin plots showing expressions of *Epcam*, *Pdgfrb*, *Ptprc* (CD45, immune cells), *Cd74* (antigen presenting cells, APC), *Cd3g* (T cells), and *Pecam1* (CD31, endothelial cells) in selected stromal cell types. **(F)** Dot plot displaying gene expression parameters including percentage of cells (size of black dots) and expression levels (colored scale bar) of a designated gene within a specific population (y-axis). Features include senescence markers (*Cdkn2a* (p16), *Cdkn2b* (p15)) and senescence-associated secretory phenotype (SASP) factor *Glb1*. **(G)** Feature plot showing *Bcl2l2* (BCL-w) expression in selected stromal cell types. **(H)** Feature plot showing *Glb1* expression in selected stromal cell types. **(I)** Senescence-associated β -galactosidase (blue) staining on tumors from 7-week-old mice. Left: 3x magnification; right: 10x zoom in. Black arrowheads denote stromal cells positive for the staining. **(J)** Gene set enrichment analyses of myCAFs versus the other two CAF subpopulations showed enrichment of TGF- β signaling. Normalized Enrichment Score (NES), p-value, and False Discovery Rate (FDR) are shown in the plot.