

Supplemental Figure 6. Depletion of senescent CAFs alters tumor immunity. (A) Uniform Manifold Approximation and Projection (UMAP) of endothelial cells and CAFs from 7-week-old MMTV-PyMT INK- and INK+ mice (n=2 for each group, datasets of both genotypes were merged with identity for clustering and downstream analysis). (B) Uniform Manifold Approximation and Projection (UMAP) of endothelial cells and CAFs from 7-week-old MMTV-PyMT mice treated with Vehicle (Veh) and ABT737 (n=2 for each group, datasets of both treatments were merged with identity for clustering and downstream analysis). (C) 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) in CAFs identified from MMTV-PyMT INK- and INK+ mice tumor samples (merged). Features include senescence markers Cdkn2a (p16) and Cdkn2b (p15), signature CAF markers as utilized in CAF flow cytometry panel Fig. S4A, and most differentially expressed genes of each CAF subpopulation (senescent CAF (senCAF): Ncam1; senCAF and myofibroblastic CAF (myCAF) in general: Pdgfra, Thbs2, and Postn; inflammatory CAF (iCAF): Ly6c1, Cxcl12, and Col14a1; vascular CAF (vCAF: Mcam, Des, Notch3)). (D) 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) in CAFs identified from vehicle (Veh) and ABT737-treated MMTV-PyMT mice (merged). Features include signature CAF markers as described in C. (E) Uniform Manifold Approximation and Projection (UMAP) of immune cells from the same MMTV-PyMT INKand INK+ mice shown in A. (F) Uniform Manifold Approximation and Projection (UMAP) of immune cells from the same MMTV-PyMT mice treated with Vehicle (Veh) or ABT737

shown in **B**. **(G)** Quantification of immune populations from INK- versus INK+ mice shown in **E**. **(H)** Quantification of immune populations from MMTV-PyMT mice treated with Vehicle (Veh) or ABT737 shown in **F**.