

SUPPLEMENTARY FIGURE LEGENDS

Figure S1. Proliferation and apoptosis of tumor cells was not significantly changed in WT versus Ron TK^{-/-} hosts. **A.** Representative images showing immunohistochemical analysis of phospho-histone H3 protein in tumors growing in WT or Ron TK^{-/-} hosts, with quantification on the right. **B.** Representative images showing immunofluorescence analysis of TUNEL staining in tumors growing in WT or Ron TK^{-/-} hosts, with quantification on the right. **C.** Representative images of PyMT-MSP, 96 hours following i.v injection, showing Dil labeled tumor cells (**top**) in the lungs of WT or Ron TK^{-/-} hosts and subsequent Image J image modification for analysis (**bottom**). **D.** Representative flow cytometric analysis **E.** Representative images of PyMT-MSP 10 days following i.v injection, showing Dil labeled tumor cells (**top**) in the lungs of WT or Ron TK^{-/-} hosts and subsequent Image J modification for analysis (**bottom**). Data are depicted as mean \pm s.e.m. N.S (not statistically significant).

Figure S2. Loss of host Ron signaling attenuates growth of seeded micro-metastasis to overt metastasis in a tumor derived MSP-independent manner.

A. Representative flow cytometric analysis (**left**) and quantification (**right**) of Dil labeled tumor cells in lung 96 hours following intravenous PyMT-MIG tumor cell injection into WT or Ron TK^{-/-} hosts (n=7 and 5 respectively)*. **B.** Representative flow cytometric analysis (**left**) and quantification (**right**) of Dil labeled tumor cells in lung 10 day following intravenous LAP control lung cancer line injection into WT or Ron TK^{-/-} hosts (n=5)**. **C.** Representative flow cytometric analysis of CD11b⁺ macrophages

expressing IL-12 isolated from lungs of WT and Ron TK^{-/-} hosts 72 hours after i.v PyMT-MSP injection. **D.** Representative flow cytometric analysis of CD11b⁺ macrophages expressing TNF α isolated from lungs of WT and Ron TK^{-/-} hosts 72 hours after i.v PyMT-MSP injection. Data are depicted as mean \pm s.e.m. *p<0.05 (unpaired, two-sided t-test); **p<0.0002 Mann Whitney test.

Figure S3. Most splenic immune cells are present in similar proportions in tumor-bearing mice WT and Ron TK^{-/-} hosts. A-F. Flow cytometric analysis of macrophages (**A**), granulocytes (**B**), myeloid-derived suppressor cells (**C**), dendritic cells (**D**), CD4⁺ T cells (**E**), and regulatory T cells (**F**). Data are represented as mean \pm s.e.m to the right of each plot (n=5 per group). N.S (not statistically significant).

Figure S4. Immunodepletion of CD8⁺ T cells following injection of anti-CD8 antibody. Flow cytometric analysis of CD8⁺ T cells in spleens (**A**), lung (**B**) and peripheral blood (**C**) of anti-CD8 antibody or control (IgG) antibody injected mice. **D.** Representative images of lung colonization in Ron TK^{-/-} hosts that have been treated with control antibody (**left**) and anti-CD8 antibody (**right**), with the image J quantification on the bottom. **E.** Representative images of lung colonization in *Prkdc^{scid}* hosts that have been injected with CD8⁺ T cells from WT or Ron TK^{-/-} hosts.

Figure S5. Treatment with a Ron inhibitor, BMS-777607, reduces metastatic outgrowth. A. Immunoblots (**upper**) and densitometric analysis (**lower**) using the indicated antibodies on MMTV-PyMT tumor cells (as a source of murine Ron) treated with increasing concentrations of BMS-777607 for 60 minutes. Data were calculated as

ratio of phosphor-Ron to total Ron. **B.** Representative images of metastatic burden in WT hosts that have been treated with vehicle or BMS-777607. **C.** Representative flow cytometric analysis of CD11b⁺ macrophages expressing TNF α , isolated from the lungs of tumor bearing WT and Ron TK^{-/-} hosts treated with vehicle only versus BMS-777607 96 hours after i.v PyMT-MSP injection. **D.** Representative flow cytometric analysis of labeled tumor cells 96 hours after intravenous tumor cell injection in animals treated with vehicle or BMS-777607 following depletion with an anti-CD8 antibody or IgG control. (n=3-4 per group).