## Supplemental Figure Legends

**Supplemental Fig 1:** Representative images (50x) of mouse tongue and cervical lymph nodes stained with anti-mHGF (arrows) versus isotype matched control antibodies. HGF expression is seen in tongue epithelium and muscle (top left panel) as well as the medulla of the lymph node and salivary gland ducts (top right panel).

**Supplement Fig 2:** Representative high magnification images of H&E stained sections of tongue (200x) and lymph nodes (400x) from JHU-SCC-012 and JHU-SCC-019 tumor bearing mice. Asterisks indicate presence of tumor in lymph node.

**Supplemental Fig 3:** Representative wound closure images of untreated JHU-SCC-012 (A) and JHU-SCC-019 (B) cells or HGF treated with or without SU11274, showing reduced gap closure of HGF treated cells in the presence of SU11274. Western analysis of HGF treated JHU-SCC-012 (C) and JHU-SCC-019 (D) cells confirmed that 1 hr pretreatment with SU11274 blocked HGF induced phosphorylation of Met (pMet).

**Supplemental Fig 4:** Representative wound closure images of control NT cells versus JHU-SCC-012 MetKD (A) and JHU-SCC-019 MetKD (B) following HGF treatment for 25 hr or 18 hr respectively.

**Supplemental Fig 5:** Representative single frame micrographs (18 min intervals) from time-lapse movies show significant changes in NT (A) but not MetKD (B) JHU-SCC-019 cell motility (circled) in response to HGF treatment. Flow cytometry (C) using the CD29 antibody detected comparable levels of cell surface Integrin  $\beta$ 1 on NT and MetKD cells in duplicate experiments.