## **Supplementary Materials**



**Figure S1.** Representative images of MDA-MB-231/LM2-4Luc<sup>+</sup> primary tumor tissue sections from animals administered SLC-0111 and sunitinib, alone and in combination, and immunohistochemically stained for Ki67 (arrows). Boxes indicate regions of interest shown at higher magnification in the lower panels. Scale bars: upper panels, 100 μm; lower panels, 20 μm.



**Figure S2.** Mean body weights of animals administered Sunitinib and SLC-0111. Initiation and completion of dosing of sunitinib are indicated by the arrows. SLC-0111 was administered daily until endpoint. Data show the mean  $\pm$  standard error of the mean (SEM). *n* = 8–10 animals/group.



**Figure S3.** Short hairpin RNA (shRNA)-mediated knockdown of Carbonic Anhydrase IX (CAIX) reduces expression of angiogenic factors by breast cancer cells in hypoxia. (**a**) MDA-MB-231LM2 cells expressing shRNA targeting CAIX were cultured in hypoxia for 72 hours and analyzed for Carbonic Anhydrase 9 (CA9) mRNA levels by qPCR. (**b**) Media conditioned by MDA-MB-231LM2 cells depleted of CAIX and cultured for 72 hours in hypoxia were analyzed for several angiogenesis-related proteins using a human angiogenesis antibody array. The mean normalized relative intensity of duplicate samples is shown. (**c**) MDA-MB-231LM2 cells expressing shRNA targeting CAIX were cultured in hypoxia for 72 hours and analyzed for Vascular Endothelial Growth Factor A (VEGFA) mRNA levels. \*\*\* *p* < 0.001.

	<b>Extensive Metastasis</b>	Small Visible Metastatic Foci	No Metastasis
Vehicle	4/5	1/5	0/5
SLC-0111	3/8	2/8	3/8
Sunitinib	6/6	0/6	0/6
Sunitinib + SLC-0111	6/7	1/7	0/7

Table S1. Number of animals with grossly visible metastasis in lungs.