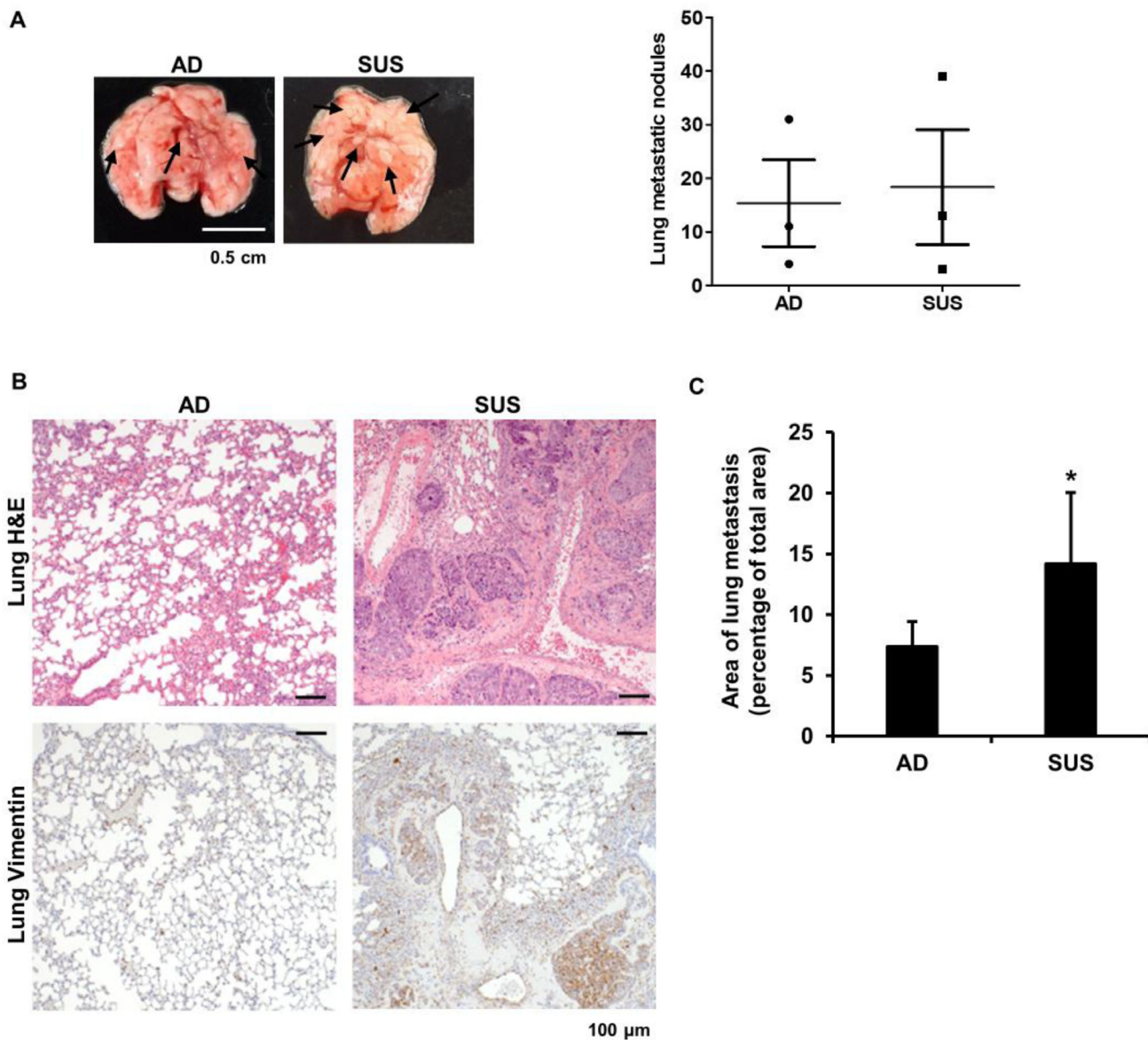


Development of suspension cell culture model to mimic circulating tumor cells

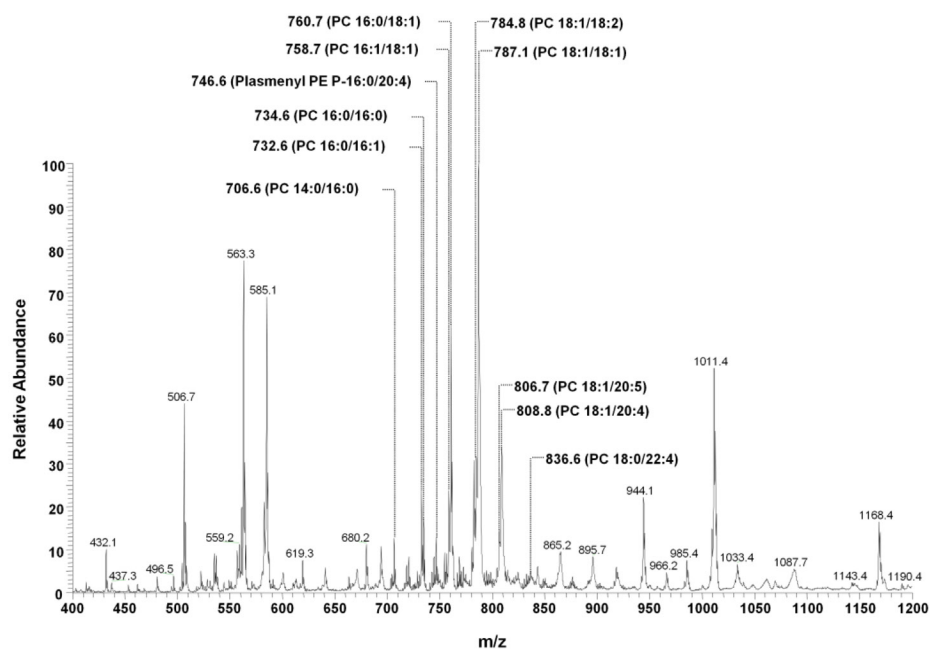
SUPPLEMENTARY MATERIALS



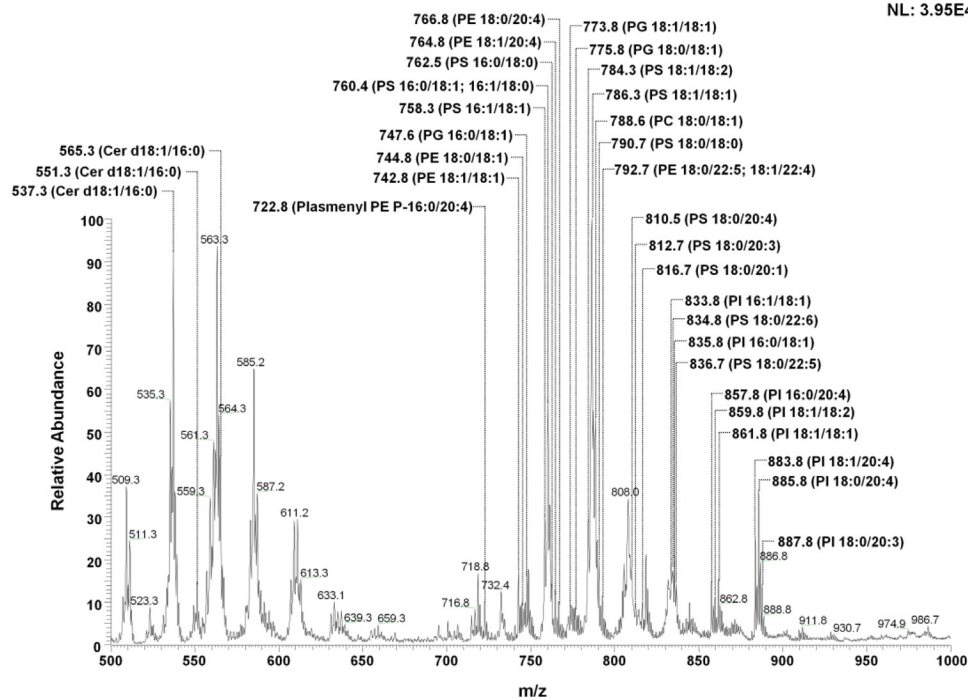
Supplementary Figure 1: Suspension cells show higher metastatic area in lung colonization. (A) MDA-MB-468 adherent or suspension cells were directly injected into the lateral tail vein of female NOD-scid-gamma (NSG) mice. Representative gross morphology of lungs at 10 weeks after tail-vein injection of adherent or suspension cells are shown. Arrows indicate metastatic nodules. Metastatic tumor nodules in the lung were counted and data are shown as means \pm SEM, $n = 6$. (B) Representative images of lung sections staining with vimentin in two groups of animals are shown (Scale bar = 100 μ m). (C) The percentage of micro-metastasis area in two groups are shown. * $p < 0.05$; one-tailed Student's t -test.

A

NL: 9.32E4

**B**

NL: 3.95E4



Supplementary Figure 2: Representative spectra of lipid profiles from lipid extracts of MDA-MB-468 cells derived from nanoESI-MS in (A) positive-ion mode and (B) negative-ion mode. Cer, ceramide; PC, phosphatidylcholine; PE, phosphatidylethanolamine; PG, phosphatidylglycerol; PS, phosphatidylserine; PI, phosphatidylinositol; m/z , mass-to-charge ratio; NL, normalized intensity level.

Supplementary Table 1: Lipid species identified from lipid extracts of adherent and suspension MDA-MB-468 cells using nanoESI-tandem MS analyses. See Supplementary_Table_1

Supplementary Table 2: Commonly up- and down-regulated genes between suspension MDA-MB-468 cells and patient CTCs. See Supplementary_Table_2