

Anti-Cancer Activity Profiling of Chemotherapeutic Agents in 3D Co-Cultures of Pancreatic Tumor Spheroids with Cancer-Associated Fibroblasts and Macrophages

So-Dam Jang, Jeeyeun Song, Hyun-Ah Kim, Chang-Nim Im, Iftikhar Ali Khawar, Jong Kook Park and Hyo-Jeong Kuh

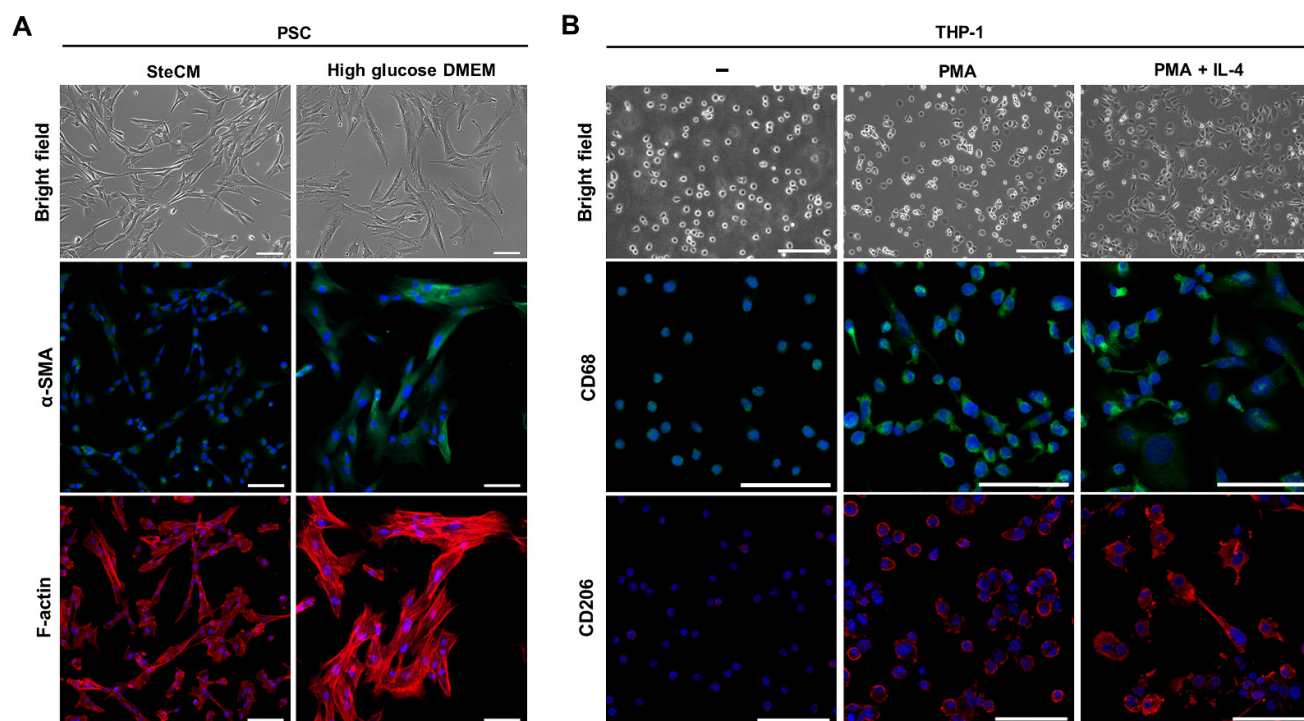


Figure S1. Activation of naive PSCs and differentiation of THP-1 cells under 2D culture conditions. (A) Bright field images and confocal images of α -SMA and F-actin expression in naive and activated PSCs. Naive PSCs were maintained using Stellate Cell Medium (SteCM) supplemented with 2% FBS, and activated by culturing in high glucose DMEM supplemented with 5% FBS for at least 72 h. (B) Bright field images and confocal images showing CD68 and CD206 expression in THP-1 cells with or without PMA and IL-4 treatment. THP-1 cells were differentiated into M0 macrophages by treating with 50 ng/mL for 48 h, and polarized to M2 macrophages with PMA treatment, followed by the addition of 20 ng/mL IL-4 and incubation for 48 h. Scale bar: 100 μ m.

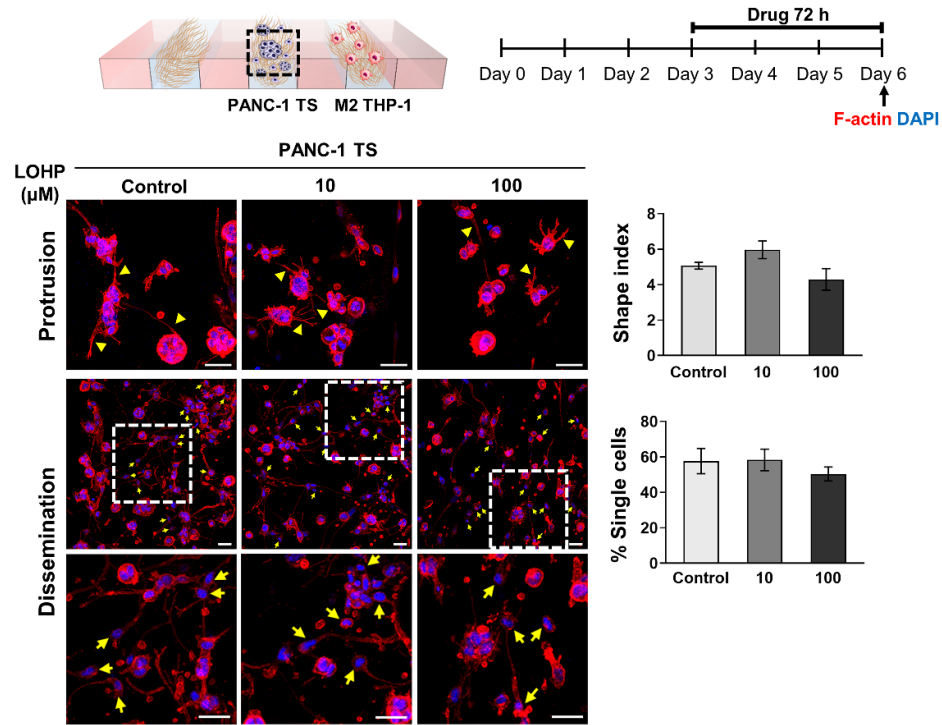


Figure S2. PANC-1 TSs maintain invasive phenotype despite oxaliplatin treatment under M2 THP-1 cell co-culture conditions. Cells grown for 3 days were exposed to LOHP-containing medium for 72 h. The morphology and single cell dissemination of PANC-1 TSs treated with or without drug were compared under M2 THP-1 cell co-culture conditions. Red: F-actin, Blue: DAPI, yellow arrowhead: membrane protrusions, yellow arrow: disseminated single cells. Data represent the mean \pm SD of three independent experiments. Scale bar: 50 μ m.

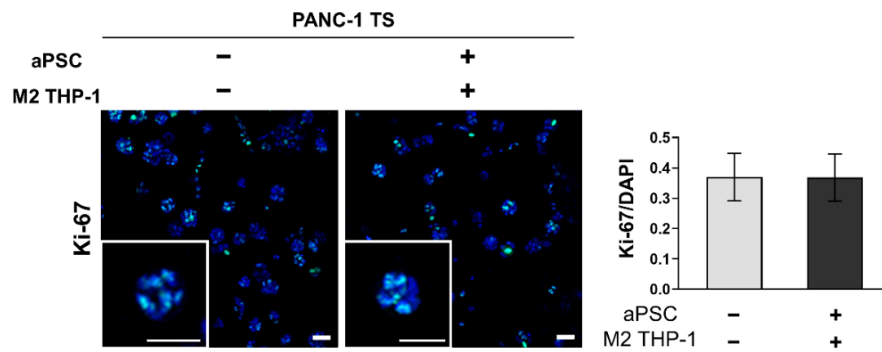


Figure S3. Expression level of Ki-67, a cell proliferation marker, in PANC-1 TSs cultured alone and those co-cultured with aPSCs and M2 THP-1 cells. Green: Ki-67, blue: DAPI. Data represent the mean \pm SD of three independent experiments. Scale bar: 50 μ m.