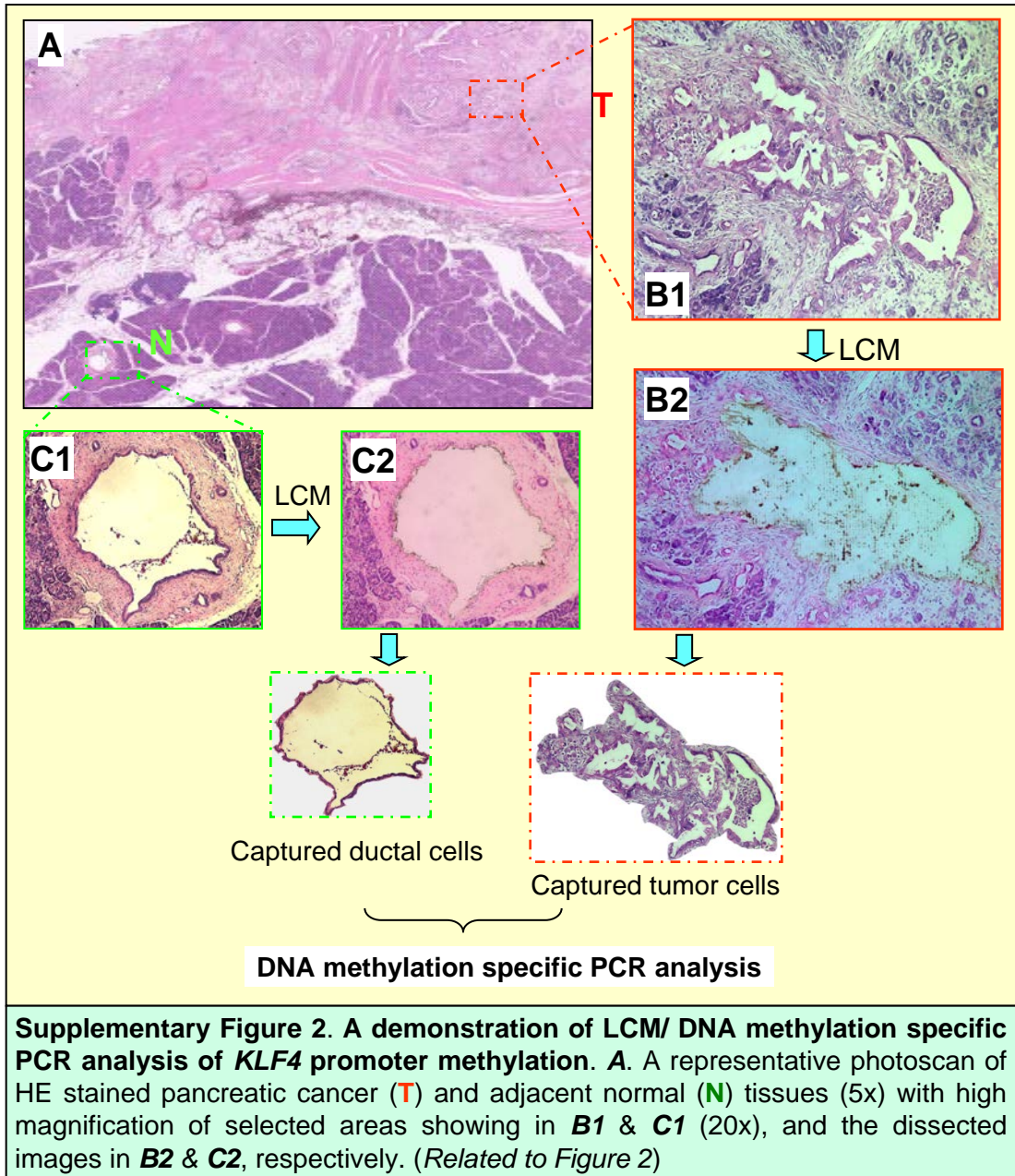
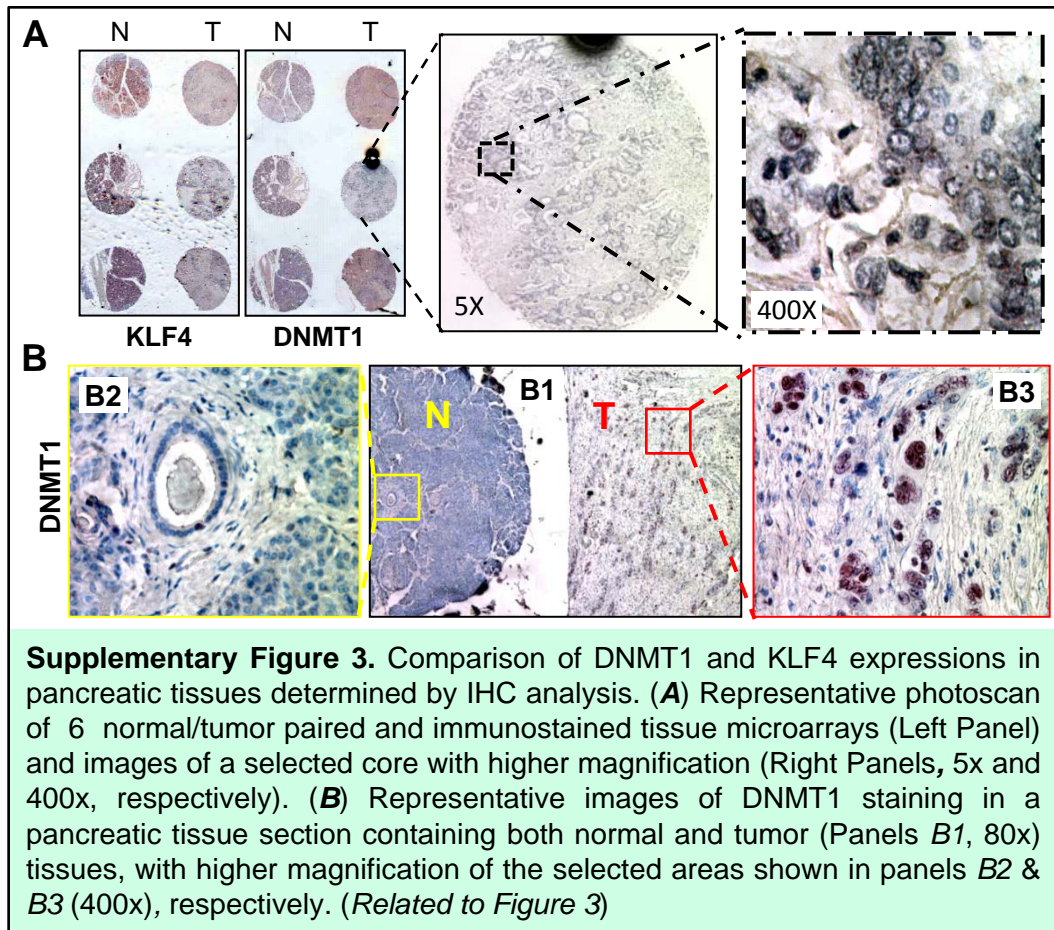
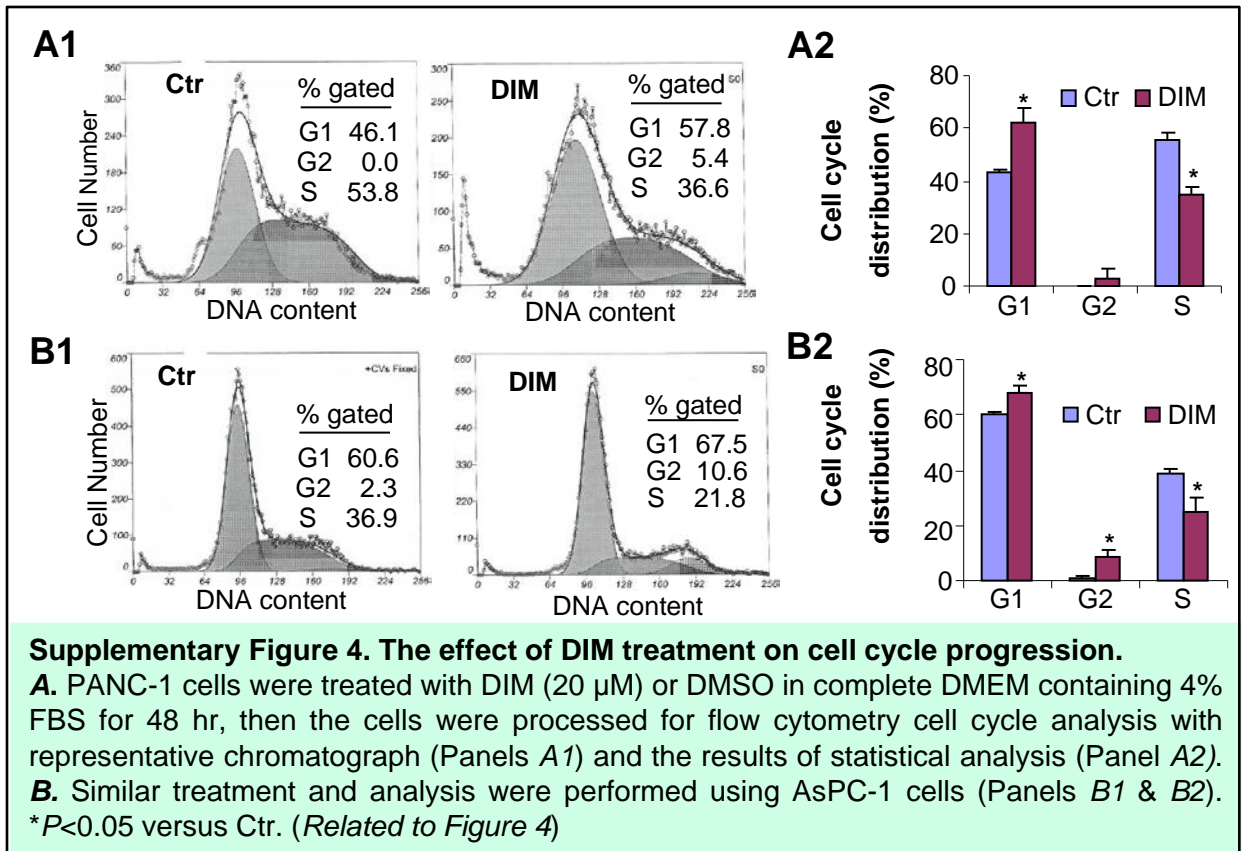


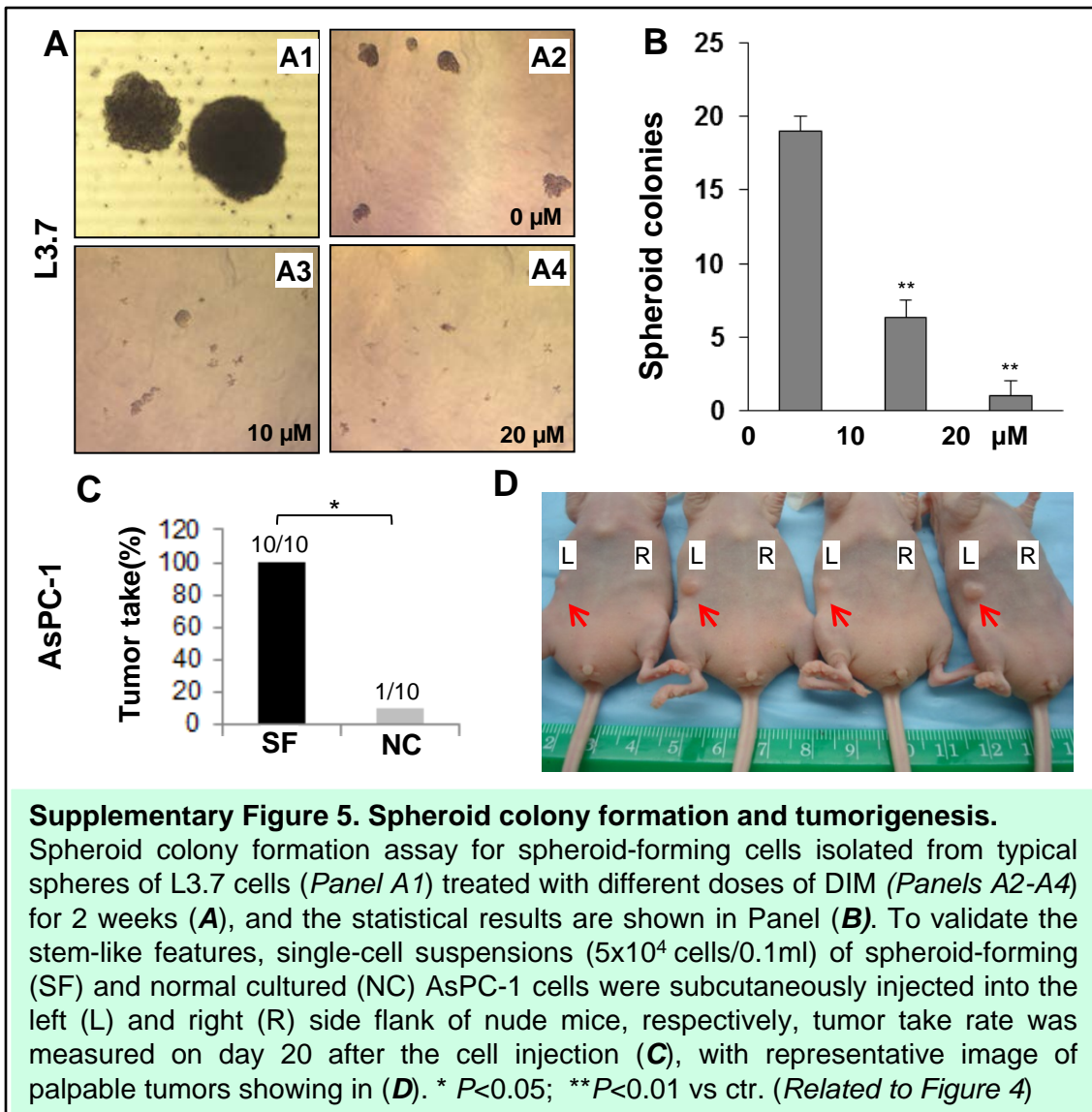
Supplementary Figure 1. Genetic and epigenetical alterations of KLF4 in pancreatic cancer

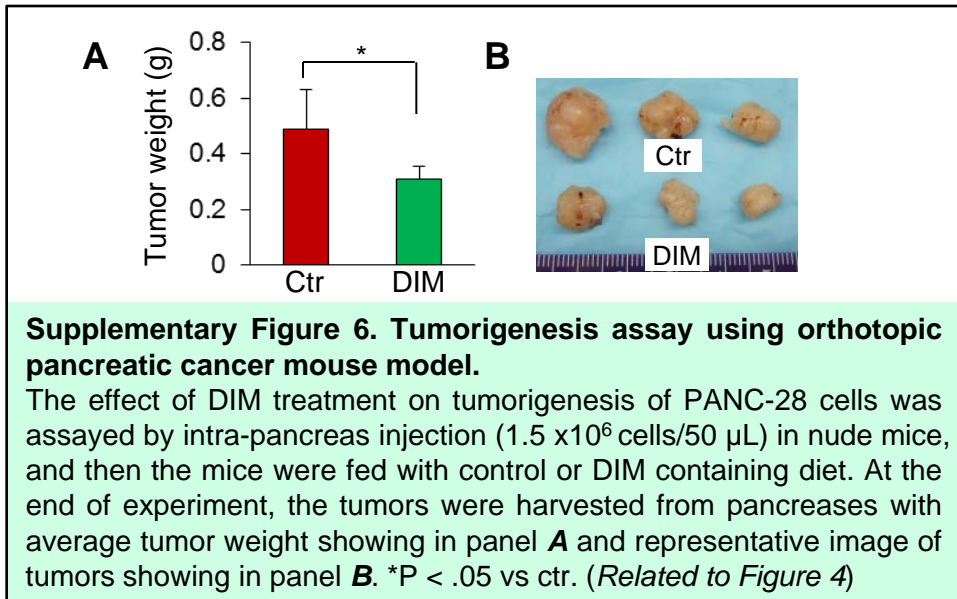
A. Genetic analysis of TCGA data sets (batch 106 & 134) containing 12 paired pancreatic normal/tumor and additional 2 pancreatic primary tumor tissues showed loss of *KLF4* gene in tumor (2 out of 14; red line) but not normal tissues. **B.** Identification and functional validation of a point mutation of *KLF4* gene in pancreatic cancer cell line. PCR-based genomic DNA sequence analysis identified a A/G point mutation of *KLF4* gene in BxPC3 pancreatic cancer cell line, which results in a amino acid change in *KLF4* protein (*KLF4*^{N338S}) (panel B1). Expressing vectors that carry EGFP-*KLF4*(*KLF4*^{WT}) and or EGFP-*KLF4*^{N338S} fusion cDNA were constructed and used to transfect 293 cells. Both EGFP-*KLF4* and EGFP-*KLF4*^{N338S} proteins are located in the unclears (panel B2). pcDNA3.1-*KLF4*^{WT} and pcDNA3.1-*KLF4*^{N338S} expressing vectors were cotransfected with p27 promoter reporter (p27MB435) vector into 293 cells, respectively, and luciferase activities were measured at 48hr after transfection (panel B3). **C.** Western blot analysis of *KLF4* protein expression in pancreatic cancer cells after presence of AZA (1 μ mol/L) or not (PBS) for 3 days. **P*<0.05 versus Ctr. (Related to Figure 2)

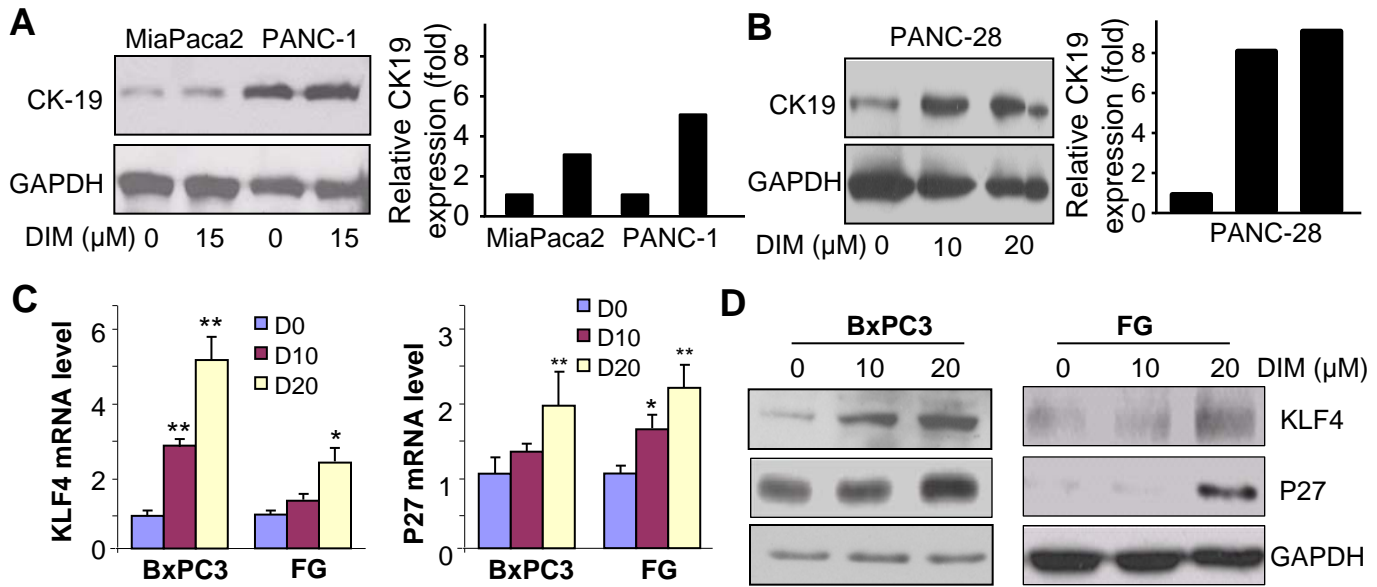












Supplementary Figure 7. The effect of DIM treatment on gene expression in pancreatic cancer cells. (A & B). In separate experiments, effect of DIM on ductal cell differentiation marker CK19 expression in MiaPaca2, PANC-1 (**A**), and PANC-28 (**B**) cells was determined by Western Blot analysis at 48 hr after different doses of DIM treatment in complete DMEM containing 4% FBS, and the relative induction was normalized with GAPDH expression, with results showing in right panel. (**C & D**). BxPC3 and FG cells were treated with different doses of DIM in complete DMEM containing 4% FBS for 48 hr, then the cells samples were processed for the analysis of KLF4 and p27 expressions by RT-qPCR (**C**) and Western blot (**D**) analysis, respectively. * $P < .05$; ** $P < .01$ versus Ctr (D0). (Related to Figure 5)

