

Supplemental Figure legends:

Figure S1. Apoptosis level is higher in HPDE Cells than in BxPc3 cells. Caspsase activity is measured at different time after cells were seeded according to manufacturer's instruction (Promega).

Figure S2. Inactivated DNase I has no effect on exDNA. DNase I was boiled for 10 minutes before used to treat MiaPaCa-2 cells. exDNA stained by 1 μ M Sytox Green (**a, b**) were degraded by DNase I (**a, c**), but not degraded by boiled DNase I (**a, d**). Bar = 20 μ m

Figure S3. DNase I does not degrade integrin beta 1. Imuunofluorescent staining with fluorophore-conjungated DNA (red) and integrin beta 1 (green) antibodies showed that while exDNA (red) was degraded, integrin beta 1 (green) was not degraded by DNase I treatment (**b** and **d**). Nuclei (blue) were stained by DNA dye DAPI. Bar = 20 μ m

Figure S4. HPDE-Kras^{G12D} produces exDNA that affect cell migration and invasion. HPDE-Kras^{G12D} cells, a HPDE cell line expressing mutated Kras, produce elevated exDNA stained by Sytox Green (arrows in **a**), which were degraded by DNase I treatment (**b**). Nuclei were also stained by Sytox Green, a non-living cell permanent DNA binding dye, because images were taken long after Sytox Green was added. DNase I treatment reduced the migration and invasion abilities of these cells (**c**). Bar = 10 μ m

Figure S5. Micronuclei in pancreatic cancer cells. Micronuclei were observed both in cytoplasm (arrows in A and B) and in the extracellular cell surface (arrows in C and D) in MiaPaCa-2 cells. Bar = 20 μ m