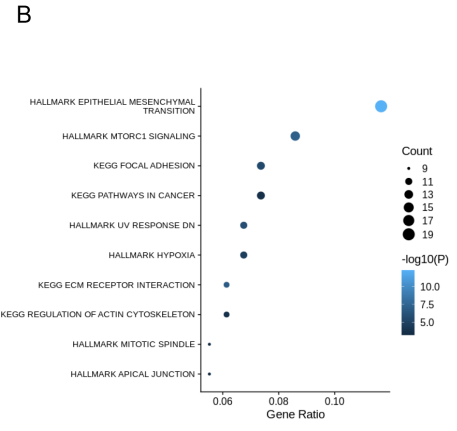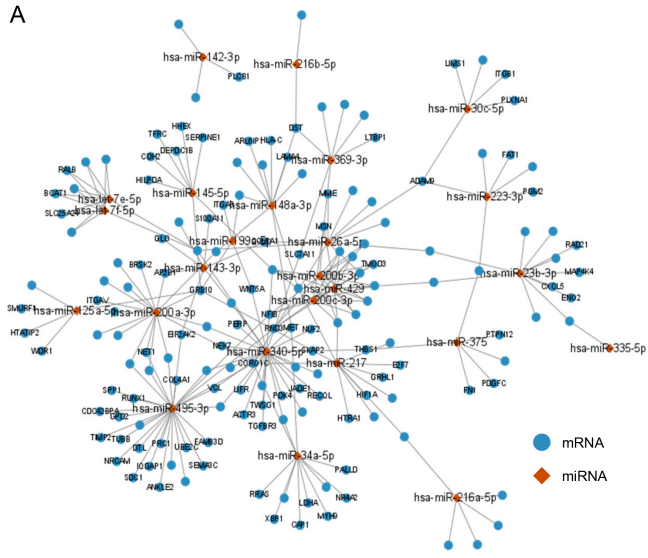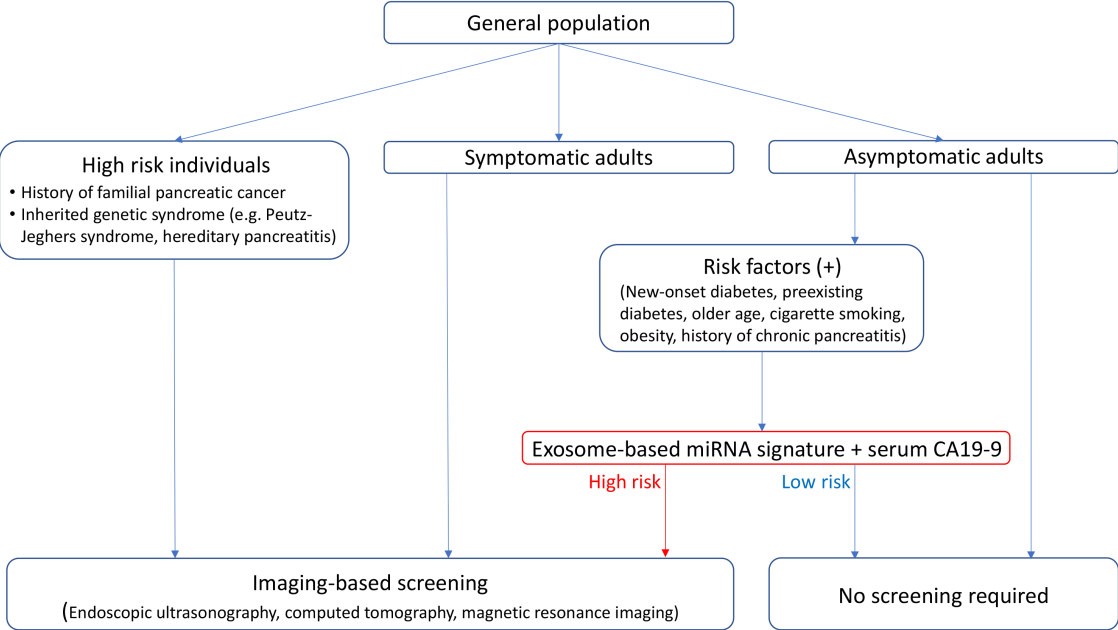**Supplementary Table 1**: Clinicopathological characteristics of pancreatic ductal adenocarcinoma patients and non-disease controls.

	Discovery cohort (n=101)	Training cohort (n=96)	Validation cohort (n=95)
Patients with PDAC	44 (43.6%)	62 (64.6%)	62 (65.3%)
Age, mean (SD), y	69.9 (±9.1)	67.3 (±10.4)	67.6 (±7.9)
Sex			
Male	26 (59.1%)	38 (61.3%)	41 (66.1%)
Female	18 (40.9%)	24 (38.7%)	21 (33.9%)
Cancer stage			
I	14 (31.8%)	13 (21.0%)	23 (37.1%)
II	30 (68.2%)	28 (45.2%)	27 (43.6%)
III	0 (0.0%)	10 (16.1%)	5 (8.1%)
IV	0 (0.0%)	10 (16.1%)	3 (4.8%)
NA		1 (1.6%)	4 (6.5%)
CA19-9, mean (SD), U/mL	-	210.6 (±192.4)	280.7 (±230.0)
Non-disease participants	57 (56.4%)	34 (35.4%)	33 (34.7%)
Age, mean (SD), y	55.4 (±8.8)	40.2 (±8.7)	41.0 (±9.1)
Sex			
Male	57 (100.0%)	15 (44.1%)	15 (45.5%)
Female	0 (0.0%)	19 (55.9%)	18 (54.6%)
CA19-9, mean (SD), U/mL	-	21.5 (±17.4)	18.2 (±22.3)

Supplementary Figure 1

A

B

Supplementary Figure 2

Supplementary Figure and Table Legend

Supplementary Figure 1: miRNA regulatory network analysis and functional analysis of the miRNA target genes. **(A)** A miRNA-mRNA regulatory network analysis. **(B)** Functional analysis using hypergeometric tests on cancer hallmarks and KEGG pathways. Significantly enriched signaling pathways (BH-adjusted P < 0.001) were illustrated in the dot plot.

Supplementary Figure 2: Schematic flow chart highlighting intended use of exosome-based miRNA signature for screening of PDAC. [PDAC: pancreatic ductal adenocarcinoma CA19-9: carbohydrate antigen 19-9]

Supplementary Table 1. Clinicopathological characteristics of pancreatic ductal adenocarcinoma patients and non-disease controls. [PDAC: pancreatic ductal adenocarcinoma; SD: standard division; NA; not available; CA19-9: carbohydrate antigen 19-9]