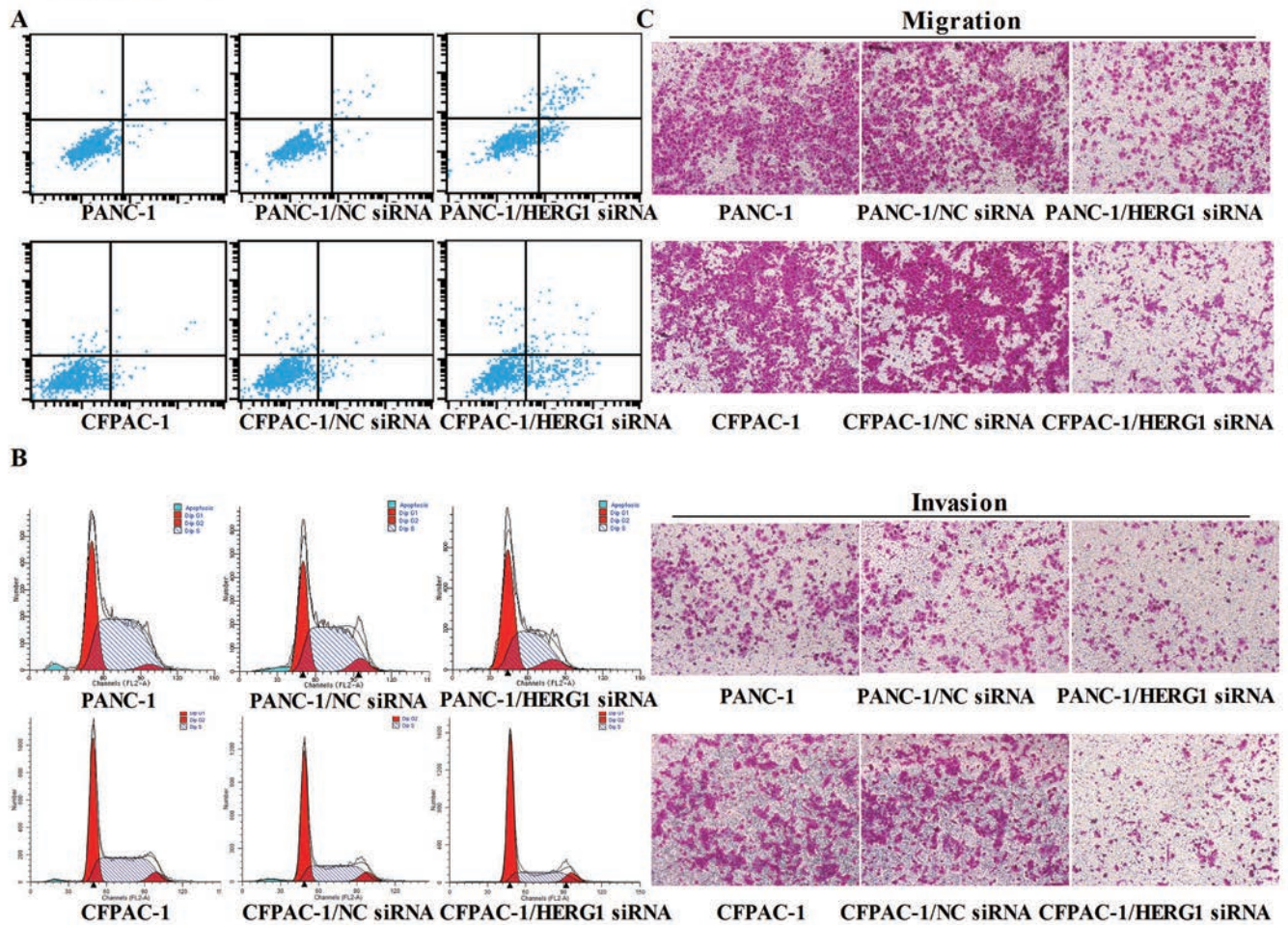
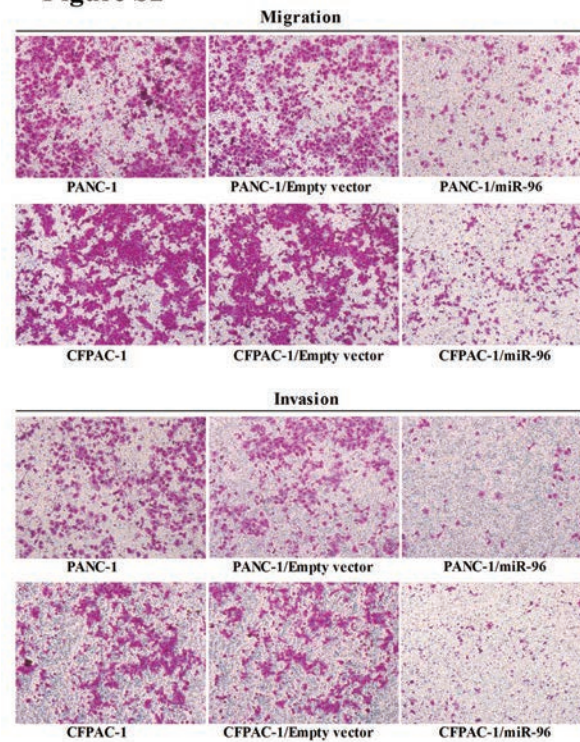


SUPPLEMENTARY FIGURES AND TABLES

Figure S1



Supplementary Figure S1: HERG1 siRNA silencing inhibits pancreatic cancer progression *in vitro*. (A) Flow cytometry analysis of apoptosis in PANC-1 and CFPAC-1 cells after HERG1 siRNA, NC siRNA transfection or without treatment; (B) Flow cytometry analysis of cell cycle progression in PANC-1 and CFPAC-1 cells after HERG1 siRNA, NC siRNA transfection or without treatment; (C) Migration and invasion assay analysis of PANC-1 and CFPAC-1 cells after HERG1 siRNA, NC siRNA transfection or no treatment. Magnification, $\times 100$.

Figure S2

Supplementary Figure S2: Overexpression of miR-96 inhibits pancreatic cancer cell migration, invasion *in vitro*. Migration and invasion assay analysis of PANC-1 and CFPAC-1 cells after transfection with pre-miR-96 plasmid or empty vector or without treatment. Magnification, $\times 100$.

Supplementary Table S1. The miRNAs potentially targeting the 3'-UTR of HERG1

miRNAs Position of HERG1 3'-UTR	miRNA (top) and predicted consequential pairing of target region (bottom)
hsa-miR-96 Position 427-440	ACACGAUCACGGUUU TGTGCT—GTGCTAAG
hsa-miR-105 Position 60-68	UCGUAAACU GGCATTGG
hsa-miR-152 Position 419-425	AAGACAG TTCTGTT
hsa-miR-199a-5p Position 382-390	UUGUGACCC AACACTGGG
hsa-miR-220 Position 193-199	GCCACAC TGGTGTG
hsa-miR-329 Position 195-201	CCACACA GGTGTGT
hsa-miR-331-5p Position 90-95	AGGGAC TCCCTG
hsa-miR-592 Position 116-123	AACUGUGU TTGACACA
hsa-let-7e Position 435-440	UUCGAU AAGCTA
hsa-let-7g Position 325-333	GGACAUGU TCTGTACA

Supplementary Table S2. Primer pairs and thermal cycling conditions

HERG1	primers	5'-CGCACCATTAGCAAGATTCCC-3' 5'-AAGACAGCCGTGTAGATGACCAG-3'
	thermal cycling conditions	denaturing phase at 95°C for 5 min, 35 cycles of 1 min at 94°C, 1 min annealing phase at 58°C, and a 1 min extension phase at 72°C, with a final extension phase of 10 min at 72°C
beta-actin	primers	5'-TGCGTGACATTAAGGAGAAGC-3' 5'-GCCAGGGTACATGGTGGTG-3'
	thermal cycling conditions	denaturing phase at 95°C for 5 min, 35 cycles of 15 seconds at 95°C, 30 seconds annealing phase at 65°C, and 30 seconds extension phase at 58°C, with a final extension phase of 10 min at 72°C

Supplementary Table S3. Oligonucleotide sequences of four different HERG1 siRNAs and a negative control siRNA

Oligo name	oligo sequences 5'to 3'
HERG1 siRNA-1-F	TGCTGCGATGAGGTCCACCACAGCCAGTTTTGGCCACTGACTGACTG GCTGTGGGACCTCATCG
HERG1 siRNA -1-R	CCTGCGATGAGGTCCCACAGCCAGTCAGTCAGTGGCCAAAACCTGGCT GTGGTGGACCTCATCGC
HERG1 siRNA -2-F	TGCTGATGTGTGGCTGCTCCATGTTGGTTTTGGCCACTGACTGACCAA CATGGCAGCCACACAT
HERG1 siRNA -2-R	CCTGATGTGTGGCTGCCATGTTGGTCAGTCAGTGGCCAAAACCAACA TGGAGCAGCCACACATC
HERG1 siRNA -3-F	TGCTGTGCTGTTGTAGGGTTTGCTAGTTTTGGCCACTGACTGACTAG GCAAAC TACAACAGCA
HERG1 siRNA -3-R	CCTGTGCTGTTGTAGTTTGCCTAGTCAGTCAGTGGCCAAAAC TAGGC AAACCCTACAACAGCAC
HERG1 siRNA -4-F	TGCTGTTTGCAGTGCTGCAGCAGTGAGTTTTGGCCACTGACTGACT ACTGCTAGCACTGCAAA
HERG1 siRNA -4-R	CCTGTTTGCAGTGCTAGCAGTGAGTCAGTCAGTGGCCAAAAC TCAC TGCTGCAGCACTGCAAAC
Negative-F	TgctgAAATGTACTGCGCGTGGAGACGTTTTGGCCACTGACTGACGTCT CCACGCAGTACATTT
Negative-R	CetgAAATGTACTGCGTGGAGACGTCAGTCAGTGGCCAAAACGTCTCC ACGCGCAGTACATTTc

Supplementary Table S4. Plasmid vector screening: silencing efficiency of four different HERG1 siRNAs and a negative control siRNA

HERG1	siRNA-1	siRNA-2	siRNA-3	siRNA-4	NC siRNA
Δ Ct	13.4335	13.6975	13.3029	13.49777	11.18273
$\Delta\Delta$ Ct	2.7465	3.0105	2.6159	2.810767	0
2- $\Delta\Delta$ Ct	0.149012	0.124094	0.1631307	0.14252	1
Interferential efficiency	0.850988	0.875906	0.8368693	0.85748	0

Supplementary Table S5. The oligonucleotide sequences of pre-miR-96 forward and reverse PCR primers

Oligo name	oligo sequences 5'to 3'
pre-miR-96-F	TCTGGGTACCGCACTGGTAGAATTCCTG
pre-miR-96-R	CCTTTCTAGACCACGGCACCATTTCAGGA