

Supplementary Table S1. The clinical data of 20 people who participated in the NGS assessment of differential mRNA, lncRNA, and miRNA gene expression.

	Health (<i>n</i> = 10)	HCC (<i>n</i> = 10)
Age (years, mean \pm SD)	36.70 \pm 7.32	66.40 \pm 10.84
Gender		
Male, <i>n</i> (%)	1 (10%)	8 (80%)
Female, <i>n</i> (%)	9 (90%)	2 (20%)

Supplementary Table S2. The clinical data of 160 individuals who had their transcript expression validated using real-time qPCR.

	Health (<i>n</i> = 100)	HCC (<i>n</i> = 60)
Age (years, mean \pm SD)	38.19 \pm 8.50	65.40 \pm 10.03
Gender		
Male, <i>n</i> (%)	24 (24%)	48 (80%)
Female, <i>n</i> (%)	76 (76%)	12 (20%)

Supplementary Table S3. The primers sequences used in real-time quantitative polymerase chain reaction.

Targeted genes	Order	Sequences
XIST	forward	5'-ACGCTG CATGTGTCCTTAG-3'
	reverse	5'-GAGCCT CTTATAAGCTGTTTG-3'
ID1	forward	5'-GCAGGTAAACGTGCTGCTCTACGA-3'
	reverse	5'-CGAGTTCAGCTCCAAGTGAAGGTC-3'
IL-1 β	forward	5'-TCCATGTCCTTTGTACAAGGAGAAGAAAGT-3'
	reverse	5'-TCGCTTTTCCATCTTCTTCTTTGGGTAAT-3'
ANXA3	forward	5'-ACTGAGATCCTGTGTTTAAGGAGCTT-3'
	reverse	5'-GGCTCGATGCAGTCTTTCGG-3'
PER1	forward	5'-GCCTCGGTACCAGCCATTCC -3'
	reverse	5'-GGTGTGTGCCGCGTAGT-3'
FN1	forward	5'-CCAGCCTACGGATGACTC-3'
	reverse	5'-AATGACCAC TGCCAAAGC-3'