Supplementary

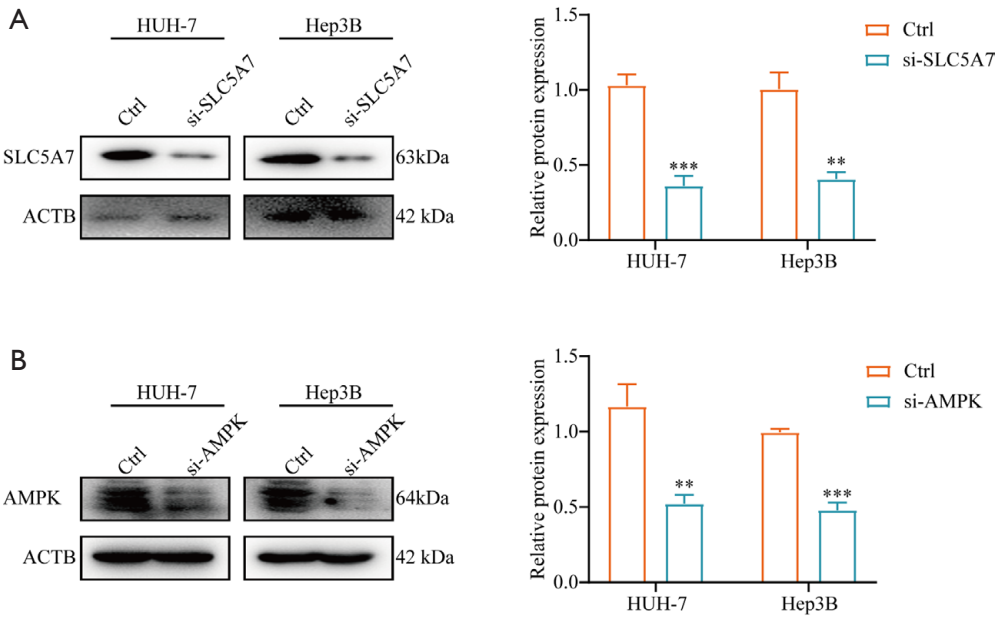

Figure S1 WB assay was used to measure the effect of choline on the expression of SLC5A7 and AMPK, quantitated by optical density and normalized to ACTB levels of the same lane. * choline group *vs.* control group; **P<0.01, ***P<0.001.

Table S1 si-SLC5A7 and si-AMPK sequences

siRNA		Sequence
Scrambled	Sense	5'-UUCUCCGAACGUGUCACGUTT-3'
	Antisense	5'-ACGUGACACGUUCGGAGAATT-3'
si-SLC5A7	Sense	5'- UUAAAGGAGGCAAAAGAAGCG-3'
	Antisense	5'- CUUCUUUUGCCUCCUUUAAAU-3'
Scrambled	Sense	5'-UUCUCCGAACGUGUCACGUTT-3'
	Antisense	5'-ACGUGACACGUUCGGAGAATT-3'
si-AMPK	Sense	5'- CCAUGAAGAGGGCCACAAUTT-3'
	Antisense	5'- AUUGUGGCCCUCUUCAUGGTT-3'

Table S2 The primer sequences

Gene	Primers (5'→3')	GenBank Accession
SLC5A7	Fwd TTGGTGGCCGAGATATTGGTT	NM_60482
	Rev GCCATTGATATACCCTCCTCCG	
18S-rRNA	Fwd GTAACCCGTTGAACCCCATT	NM_544669
	Rev CCATCCAATCGGTAGTAGCG	

https://dx.doi.org/10.21037/hbsn-22-476

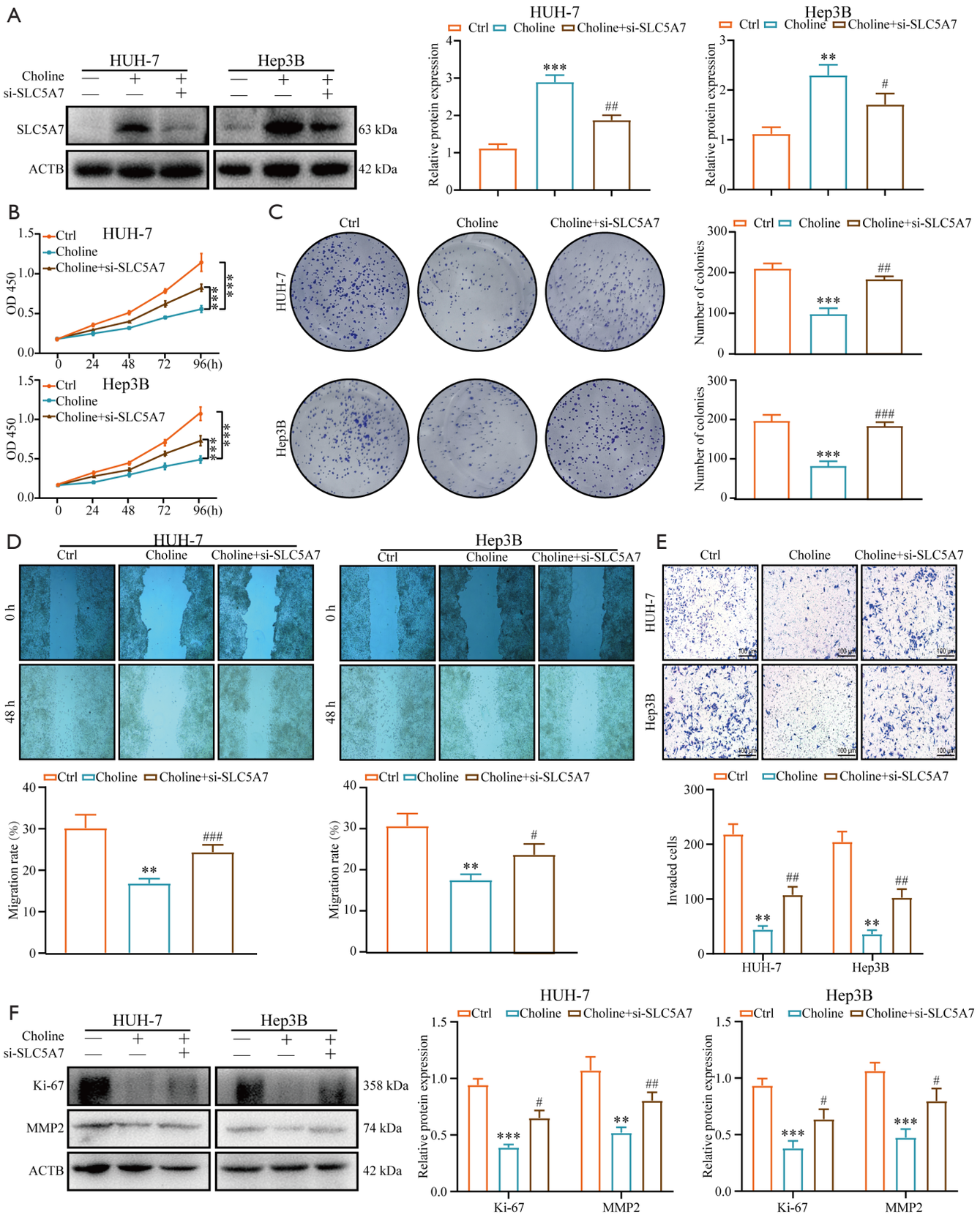

Figure S2 (A) WB analysis of SLC5A7 in HCC cells treated with choline alone and choline combined with si-SLC5A7. Expression of SLC5A7 was quantitated based on optical density. The level of SLC5A7 was normalized to ACTB levels of the same lane. (B,C) HUH-7 and Hep3B cells were subjected to three groups: control group, Choline group, and Choline+si-SLC5A7 group. Cells viability was detected by CCK-8 and colony formation assays. Cells in colony formation assay were stained by 0.1% crystal violet. (D,E) Wound healing and transwell assays were used to detect cell migration and invasion under different treatment. Cells in transwell assay were stained by 0.1% crystal violet. Scale bar= 100 μm. (F) WB analysis of Ki-76 and MMP2 in HCC cells treated with choline alone and choline combined with si-SLC5A7. Expression of Ki-67 and MMP2 was quantitated based on optical density. The level of Ki-67, and MMP2 was normalized to ACTB levels of the same lane. * choline group *vs.* control group, # choline+si-SLC5A7 group *vs.* choline group; **P<0.01, ***P<0.001, #P<0.05, ##P<0.01, ###P<0.001.