

Supplementary

Table S1 Clinical characteristics of patient for IHC

Characteristics	IHC score low	IHC score high	χ^2	P
Age, years			0.154	>0.99
<60	7	6		
>60	6	7		
Tumor grade			3.939	0.11
II	5	10		
III-IV	8	3		
Etiology HBV			1.418	0.43
No	7	4		
Yes	6	9		

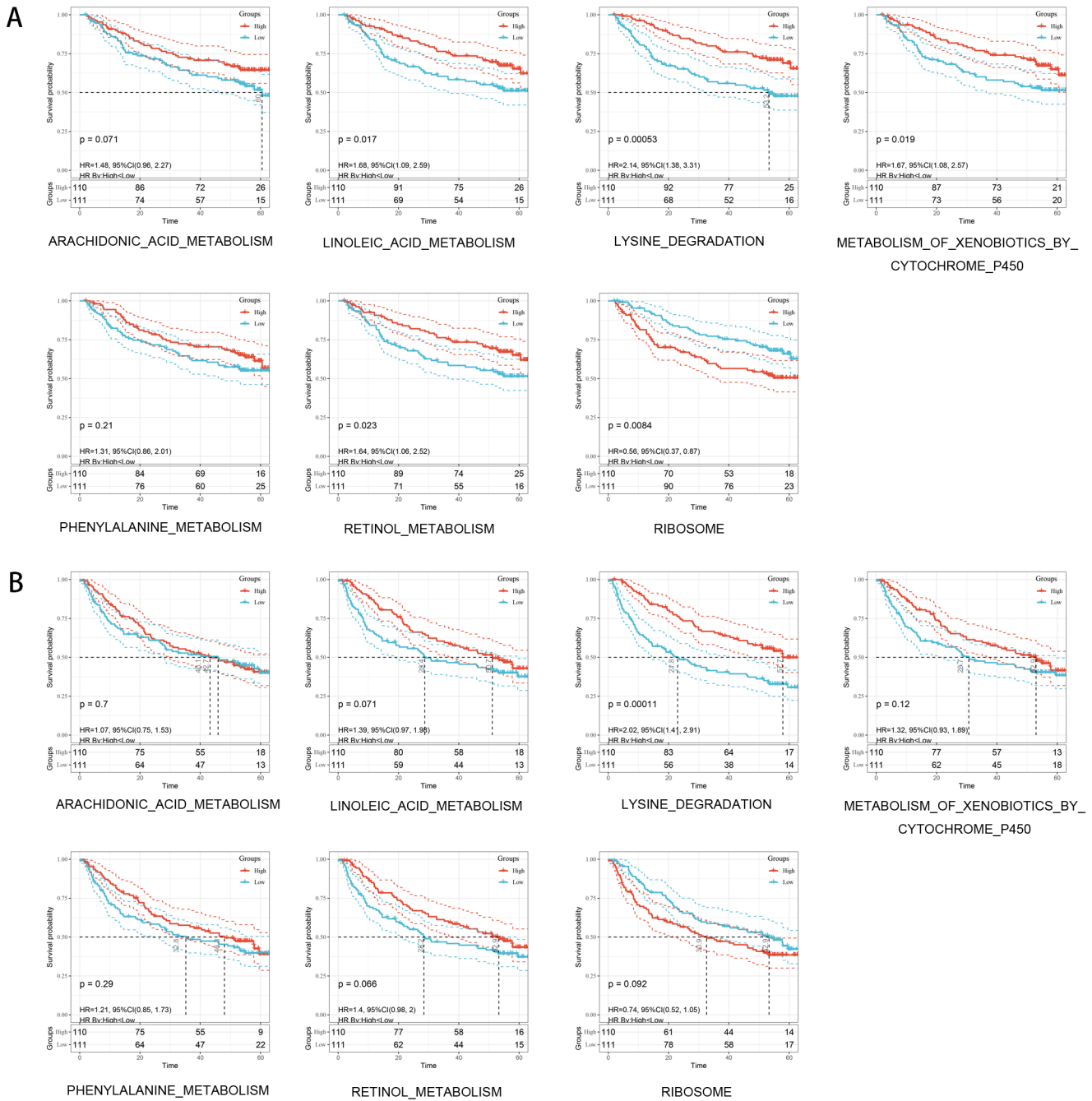


Figure S1 Prognosis related to the filtered signaling pathway. (A) Kaplan-Meier curves were used to measure the overall survival (OS) based on the filtered signaling pathways. (B) Kaplan-Meier curves were used to measure the OS based on the filtered signaling pathways.

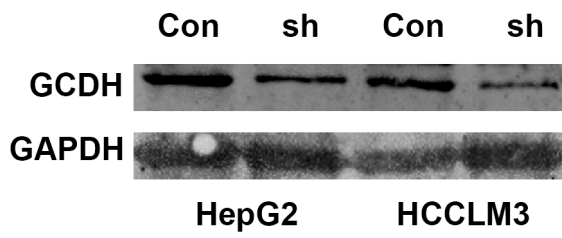


Figure S2 Knockdown effect of shRNA-GCDH. Western blotting (WB) was used to examine the protein expression of GCDH in the indicated cell lines