

**Supplementary Table 2.** Cox sub-distribution hazards model for risk factors of HCC development among CHC patients in whom antiviral therapy failed, with liver cirrhosis or advanced fibrosis (FIB-4≥3.25) as the confounding factor

Variables	Based on LC			Based on advanced fibrosis		
	aSHR (95% CI)	P-value	aSHR (95% CI)	aSHR (95% CI)	P-value	aSHR (95% CI)
Age (years)						
<65	1		1	1		1
≥65	1.89 (1.52–2.36)	<0.001*	1.89 (1.52–2.36)	1.35 (1.11–1.87)	0.012*	1.35 (1.11–1.87)
Sex						
Female	1		1	1		1
Male	1.14 (0.92–1.40)	0.225	1.14 (0.92–1.40)	1.02 (0.77–1.23)	0.589	1.02 (0.77–1.23)
Aspirin						
No	1		1	1		1
Yes	0.71 (0.51–1.00)	0.049*	0.71 (0.51–1.00)	0.73 (0.55–1.02)	0.079	0.73 (0.55–1.02)
DM/metformin						
Non-DM	1		1.05 (0.76–1.44)	1		1.05 (0.81–1.45)
DM/metformin (+)	0.95 (0.69–1.31)	0.763	1	0.95 (0.69–1.24)	0.650	1
DM/metformin (-)	1.51 (1.12–2.04)	0.007*	1.59 (1.07–2.36)	1.54 (1.16–2.03)	0.005*	1.60 (1.13–2.85)
HLP/statin						
Non-HLP	1		2.02 (1.46–2.78)	1		2.00 (1.49–2.94)
HLP/statin (+)	0.50 (0.36–0.68)	<0.001*	1	0.47 (0.34–0.67)	<0.001*	1
HLP/statin (-)	0.75 (0.44–1.28)	0.289	1.51 (0.83–2.75)	0.68 (0.38–1.10)	0.145	1.40 (0.76–2.54)
FIB-4						
<3.25	-		-	1		1
≥3.25	-		-	3.01 (2.45–3.64)	<0.001*	3.01 (2.45–3.64)
Liver cirrhosis						
No	1		1	-		-
Yes	2.27 (1.81–2.85)	<0.001*	2.27 (1.81–2.85)	-		-
HCV RNA (IU/mL)						
≤8,000,000	1		1	1		1
>8,000,000	0.73 (0.51–1.04)	0.079	0.73 (0.51–1.04)	0.89 (0.50–1.12)	0.121	0.89 (0.50–1.12)
HCV genotype						
Non-1	1		1	1		1
1	1.30 (1.04–1.63)	0.022*	1.30 (1.04–1.63)	1.41 (1.01–1.64)	0.036*	1.41 (1.01–1.64)

DM, diabetes mellitus; HLP, hyperlipidemia; FIB-4, fibrosis index based on four factors; LC, liver cirrhosis; HCC, hepatocellular carcinoma; aSHR, adjusted sub-distribution hazard ratio.

\*p<0.05.