Supplementary Table 1. Score of quality assessment

Criteria*	Score
Representativeness of case	
Selected from population cancer registry	2
Selected from hospital	1
No method of selection described	0
Representativeness of control	
Population-based	3
Blood donors	2
Hospital-based	1
Not described	0
Ascertainment of HCC case	
Histopathologic confirmation or CT/MRI*	2
by patient medical record	1
Not described	0
Control selection	
Controls matched with cases by age and sex	2
Controls matched with cases only by age or by sex	1
Not matched or not descried	0
Genotyping examination	
Genotyping done blindly and quality control	2
Only genotyping done blindly or quality control	1
Unblinded and without quality control	0
HWE	
HWE in the control group	1
HWD in the control group or not mentioned	0
Total sample size	
> 1000	3
501 - 1000	2
201 - 500	1
$\leq$ 200	0

*Slightly modified according to the NCCN Clinical Practice Guidelines in oncology (NCCN Guidelines). Hepatobiliary Cancers. Version 1. 2018.

**Study quality is defined as low if QS$\leq$9 or high if QS$>$9.

Supplementary Table 2 Subgroup analysis results by quality score of association between *rs2596542G>A* and HCV-induced HCC

Sample	Comparison	Number of Studies	Test of Heterogeneity		Meta-analysis Results		Comparison Model
			P(Q-test)	I^2	OR (95% CI)	P	
High*	**GG vs. AA**	**2**	**0.513**	**0.00%**	**0.608(0.526, 0.702)**	**0.000**	**FEM**
	GA vs. AA	**2**	**0.769**	**0.00%**	**0.849(0.737, 0.977)**	**0.022**	**FEM**
	GA+GG vs. AA	**2**	**0.601**	**0.00%**	**0.724(0.634, 0.827)**	**0.000**	**FEM**
	GG vs. GA+AA	**2**	**0.517**	**0.00%**	**0.687(0.624, 0.757)**	**0.000**	**FEM**
	G vs. A	**2**	**0.446**	**0.00%**	**0.756(0.706, 0.810)**	**0.000**	**FEM**
Low*	GG vs. AA	5	0.014	67.90%	0.818(0.436, 1.536)	0.532	REM
	GA vs. AA	**5**	**0.237**	**27.70%**	**0.698(0.512, 0.950)**	**0.022**	**FEM**
	GA+GG vs. AA	5	0.123	44.90%	0.760(0.570, 1.013)	0.061	FEM
	GG vs. GA+AA	5	0.003	74.50%	0.972(0.611, 1.545)	0.903	REM
	G vs. A	5	0.011	69.50%	0.934(0.694, 1.257)	0.653	REM

Abbreviations: FEM, Fixed-effect Model; REM, Random-effect Model.

*High: QS＞9.　　**Low: QS≤9.

Supplementary Table 3 Subgroup analysis results by quality score of association between *rs2596542G>A* and HCC among Asian cohort

Sample	Comparison	Number of Studies	Test of Heterogeneity		Meta-analysis Results		Comparison Model
			P(Q-test)	I^2	OR (95% CI)	P	
High*	GG vs. AA	4	0.000	85.80%	0.798(0.550, 1.158)	0.235	REM
	GA vs. AA	4	0.209	33.90%	0.898(0.792, 1.017)	0.090	FEM
	GA+GG vs. AA	4	0.007	75.40%	0.862(0.659, 1.127)	0.277	REM
	GG vs. GA+AA	4	0.000	88.40%	0.839(0.653, 1.077)	0.169	REM
	G vs. A	4	0.000	89.80%	0.882(0.724, 1.075)	0.214	REM
Low**	**GG vs. AA**	**4**	**0.265**	**24.40%**	**0.616(0.443, 0.856)**	**0.004**	**FEM**
	GA vs. AA	**4**	**0.229**	**30.50%**	**0.657(0.474, 0.912)**	**0.012**	**FEM**
	GA+GG vs. AA	**4**	**0.226**	**31.10%**	**0.636(0.468, 0.865)**	**0.004**	**FEM**
	GG vs. GA+AA	4	0.589	0.00%	0.838(0.676, 1.038)	0.106	FEM
	G vs. A	**4**	**0.419**	**0.00%**	**0.814(0.697, 0.951)**	**0.010**	**FEM**

Abbreviations: FEM, Fixed-effect Model; REM, Random-effect Model.

*High: QS＞9.　　**Low: QS≤9.