## The Associations of HLA-A\*02:01 and DRB1\*11:01 with Hepatitis C Virus Spontaneous Clearance Are Independent of *IL28B* in the Chinese Population

Jieting Huang<sup>1,2\*</sup>, Ke Huang<sup>1,2\*</sup>, Ru Xu<sup>1,2\*</sup>, Min Wang<sup>1,2</sup>, Qiao Liao<sup>1,2</sup>, Huaping Xiong<sup>1,2</sup>, Chengyao Li<sup>3</sup>, Xi Tang<sup>3</sup>, Zhengang Shan<sup>1,2</sup>, Ming Zhang<sup>4</sup>, Xia Rong<sup>1,2</sup>, Kenrad Nelson<sup>5</sup>, Yongshui Fu<sup>1,2</sup>

Table S1. Clearance rate of the study population

Table 51. Clearance rate of the study population							
Gender	Spontaneous	Persistent	Clearance	Р	OR (95%C.I.)		
	clearance	infection	rate (%)	(male/female)			
Male	152	1046	12.7	2.03E-9	0.207 (0.202, 0.541)		
Female	79	216	26.8	2.03E-9	0.397 (0.292, 0.541)		
Total	231	1262	15.5				

Table S2. Subjects with available HLA genotyping results

	J	8 7 8
HLA	Spontaneous clearance	Persistent infection
А	231	429
В	231	429
С	230	427
DPB1	227	427
DQB1	230	429
DRB1	231	429

Table S3. Association of *IL28B* rs12979860 with HCV spontaneous clearance in Chinese population

population				
rs12979860	Spontaneous clearance	Persistent infection	Р	OR (95%C.I.)
	n (%)	n (%)		
Allele				
С	451 (97.6)	784 (91.4)	1.04E-5	3.870 (2.033, 7.368)
Т	11 (2.4)	74 (8.6)		
rs12979860			CC vs	
			CT+TT	
CC	221 (95.7)	355 (82.8)		
СТ	9 (3.9)	74 (17.2)	2.03E-6	4.607 (2.331, 9.106)
TT	1 (0.4)	0 (0)		

	<i>IL28B</i> TT (n=575)				<i>IL28B</i> TG+GG (n=85)			
	Spontaneous	Persistent			Spontaneous	Persistent		
HLA	clearance	infection	Р	OR (95% CI)	clearance	infection	Р	OR (95% CI)
	(2n=442)	(2n=708)			(2n=20)	(2n=150)		
A*02:01	47 (10.6)	47 (6.6)	0.016	1.673 (1.096, 2.555)	0 (0)	5 (3.3)	0.999	-
DQB1*03:01	118 (26.8)	135 (19.1)	0.002	1.555 (1.173, 2.063)	3 (15.0)	32 (21.3)	0.769	0.651 (0.179, 2.359)
DQB1*05:02	36 (8.2)	94 (13.3)	0.008	0.582 (0.389, 0.872)	2 (10.0)	19 (12.7)	0.999	0.766 (0.165, 3.567)
DRB1*04:05	16 (3.6)	48 (6.8)	0.023	0.516 (0.290, 0.921)	0 (0)	4 (2.7)	0.999	-
DRB1*11:01	42 (9.5)	38 (5.4)	0.007	1.851 (1.173, 2.921)	2 (10.0)	7 (4.7)	0.286	2.270 (0.438, 11.774)
DRB1*15:01	41 (9.3)	89 (12.6)	0.086	0.711 (0.481, 1.051)	2 (10.0)	18 (12.0)	0.999	0.815 (0.174, 3.807)

Table S4. The associations of HLA alleles with HCV spontaneous clearance stratified by their *IL28B* genotype

			Positive	Negative
Genotype	Sensitivity	Specificity	predictive value	predictive value
IL28B	22.9	90.7	57.0	68.6
HLAs	26.0	95.1	55.8	70.5
IL28B+HLAs	28.1	88.9	57.8	69.7

Table S5. Prediction of HCV spontaneous clearance

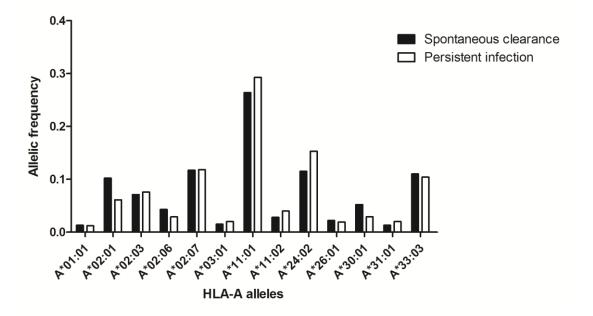


Figure S1. HLA-A diversity between the subjects with HCV clearance and persistent infection. Alleles with frequencies higher than 1.0% are shown.

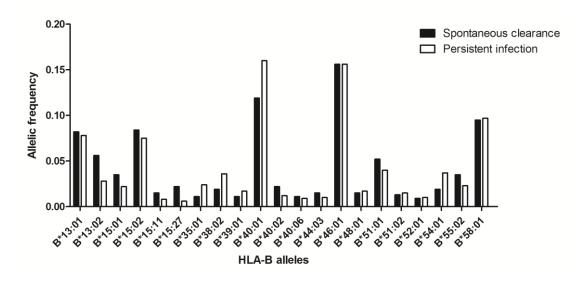


Figure S2. HLA-B diversity between the subjects with HCV clearance and persistent infection. Alleles with frequencies higher than 1.0% are shown.

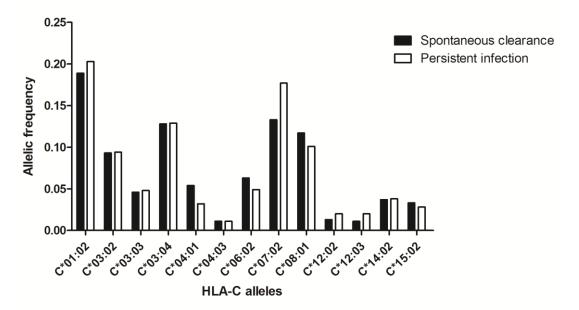


Figure S3. HLA-C diversity between the subjects with HCV clearance and persistent infection. Alleles with frequencies higher than 1.0% are shown.

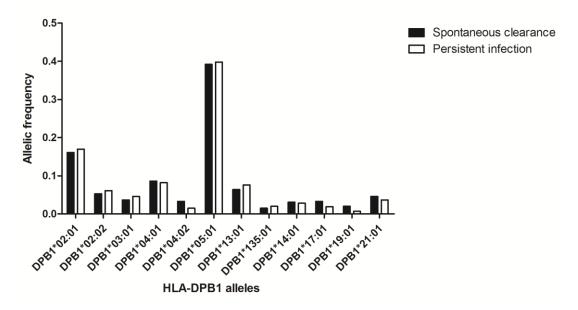


Figure S4. HLA-DPB1 diversity between the subjects with HCV clearance and persistent infection. Alleles with frequencies higher than 1.0% are shown.

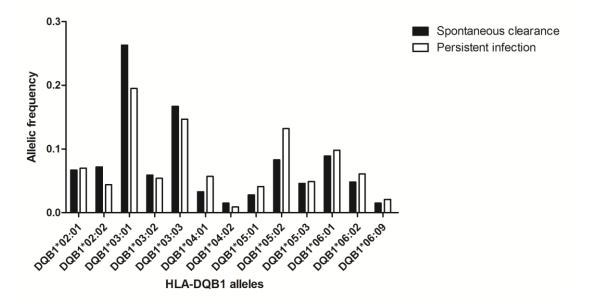


Figure S5. HLA-DQB1 diversity between the subjects with HCV clearance and persistent infection. Alleles with frequencies higher than 1.0% are shown.

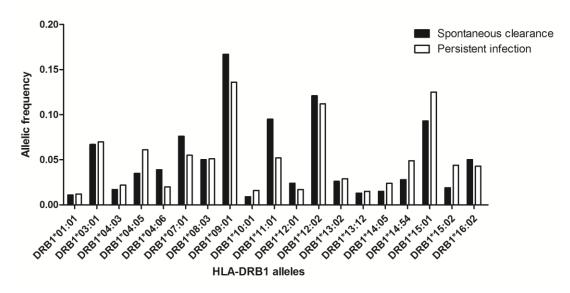


Figure S6. HLA-DRB1 diversity between the subjects with HCV clearance and persistent infection. Alleles with frequencies higher than 1.0% are shown.