

Genetic variants in interferon- λ 4 influences HCV clearance in Chinese Han population

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Supplemental Table 1. Information of primers and probes for TaqMan allelic discrimination

Polymorphism		Sequence(5'-3')
<i>IL28B</i> rs12979860	Primer	F: GCGCGGAGTGCAATTCAAC R: TGTACTGAACCAGGGAGCTC
	Probe	FAM-CTGGTTCACGCCTTC-MGB HEX-TGGTTCGCGCCTTC-MGB
<i>IFNL4</i> ss469415590	Primer	F: GATGCGGCCGAGTGTCT R: CTCCAGCGAGCGGTAGTG
	Probe	FAM-ATCGCAGCGGCC-MGB HEX-TCGCAGAAGGCC-MGB

Supplemental Table 2. Association of selected polymorphisms with RVR and EVR

Genotype	N-RVR N(%)	RVR N(%)	OR (95% CI)	P value	N-EVR N(%)	EVR N(%)	OR (95% CI)	P value
rs12979860								
CC	129 (59.4)	116 (80.0)	1.00		37 (52.9)	204 (69.9)	1.00	
CT	67 (30.9)	12 (8.3)	0.19 (0.09-0.38)	< 0.001	29 (41.4)	52 (17.8)	0.32 (0.17-0.58)	< 0.001
TT	21 (9.7)	17 (11.7)	0.98 (0.49-1.97)	0.951	4 (5.7)	36 (12.3)	1.41 (0.47-4.25)	0.545
Dominant			0.37 (0.23-0.62)	< 0.001			0.46 (0.26-0.81)	0.007
Recessive			1.36 (0.68-2.71)	0.381			2.02 (0.69-5.96)	0.199
Additive			0.67 (0.48-0.94)	0.022			0.78 (0.53-1.15)	0.206
ss469415590								
TT/TT	169 (77.9)	134 (92.4)	1.00		38 (54.2)	265 (90.8)	1.00	
TT/ΔG	45 (20.7)	10 (6.9)	0.24 (0.11-0.53)	< 0.001	30 (42.9)	25 (8.6)	0.11 (0.05-0.23)	< 0.001
ΔG/ΔG	3 (1.4)	1 (0.7)	0.48 (0.05-4.78)	0.528	2 (2.9)	2 (0.7)	0.12 (0.02-0.94)	0.043
Dominant			0.26 (0.12-0.54)	< 0.001			0.11 (0.06-0.22)	< 0.001
Recessive			0.58 (0.06-5.71)	0.638			0.21 (0.03-1.58)	0.130
Additive			0.30 (0.15-0.60)	0.001			0.15 (0.08-0.29)	< 0.001

Abbreviation: RVR, rapid virological response; EVR, early virological response.

Logistic regression analyses adjusted for age, gender, HCV RNA and platelets.

Supplemental Table 3. Characteristics of association studies on *IFNL4* ss469415590 and HCV clearance and response to treatment

a) Studies on HCV spontaneous clearance					
First author, date	Genotype/Model	Chronic/Resolver	OR (95% CI)	P value	Participants
Prokunina-Olsson et al. 2013 (UHS)	TT/TT	45/30	3.51	7.9×10 ⁻⁵	African-American and European-American
	TT/ΔG	168/53	1.66	0.056	
	ΔG/ΔG	137/26	1.00		
Prokunina-Olsson et al. 2013 (ALIVE)	TT/TT	66/23	4.68	5.5×10 ⁻⁶	African-American
	TT/ΔG	265/36	1.82	0.043	
	ΔG/ΔG	255/19	1.00		
Bibert et al. 2013	TT/TT	189/63			White ethnicity
	TT/ΔG	292/29			
	ΔG/ΔG	59/1			
Knapp et al. 2015	Additive		0.28 (0.18-0.43)	8.68×10 ⁻⁹	Egyptians
	TT/TT	22/38	1.00		
	TT/ΔG+ΔG/ΔG	86/39	3.81 (1.99-7.28)	< 0.001	
b) Studies on HCV response to treatment					
First author, date	Genotype/Model	N-SVR/SVR	OR (95% CI)	P value	Participants
Prokunina-Olsson et al. 2013 (Virahep-C)	TT/TT	9/7	2.90	0.067	African-American and European-American
	TT/ΔG	56/26	1.73	0.14	
	ΔG/ΔG	56/15	1.00		
Prokunina-Olsson et al. 2013 (HALT-C)	TT/TT	6/2	11.0	0.027	African-American and European-American
	TT/ΔG	60/6	3.19	0.16	
	ΔG/ΔG	66/2	1.00		
Bibert et al. 2013	TT/TT	37/152			White ethnicity
	TT/ΔG	131/161			
	ΔG/ΔG	35/24			
St ätermayer et al. 2014 (Genotype 1)	Additive		0.38 (0.28-0.51)	2.51×10 ⁻¹⁰	Caucasians (98.8%)
	TT/TT	32/114			
	TT/ΔG	119/107			

	ΔG/ΔG	31/29			
	Additive		2.22 (1.63-3.02)	< 0.001	
St ätermayer et al. 2014 (Genotype 2/3)	TT/TT	17/70			Caucasians (98.8%)
	TT/ΔG	22/76			
	ΔG/ΔG	9/14			
	Additive		1.51 (0.93-2.46)	0.093	
St ätermayer et al. 2014 (Genotype 4)	TT/TT	5/32			Caucasians (98.8%)
	TT/ΔG	33/30			
	ΔG/ΔG	1/3			
	Additive		5.36 (2.46-11.68)	< 0.001	
Covolo et al. 2014 (Genotype 1)	TT/TT	50/35	7.25 (1.91-27.51)	0.004	Caucasians
	TT/ΔG	39/21	0.58 (0.19-1.83)	0.36	
	ΔG/ΔG	10/9	1.00		
Covolo et al. 2014 (Genotype 2/3)	TT/TT	5/59	1.60 (0.5-5.0)	0.4	Caucasians
	TT/ΔG+ΔG/ΔG	4/85	1.00		
Nozawa et al. 2014 (Genotype 1)	TT/TT	20/122	1.00		Japanese
	TT/ΔG+ΔG/ΔG	32/40	4.73 (2.43-9.20)	0.019	
Miyamura et al. 2014 (Genotype 1)	TT/TT	33/60			Japanese
	TT/ΔG+ΔG/ΔG	38/10	2.56 (1.01-6.56)	0.049	
Palmieri et al. 2014 (Genotype 1)	TT/TT	36/74	4.73 (3.02-7.40)	9.87 × 10 ⁻¹³	Caucasians
	TT/ΔG	229/102			
	ΔG/ΔG	70/28			
Nagaoki et al. 2014 (Genotype 1)	TT/TT	13/163		< 0.001	Japanese
	TT/ΔG+ΔG/ΔG	44/63			

Abbreviation: N-SVR, non sustained virological response; SVR, sustained virological response.

Additive: TT/TT vs TT/ΔG vs ΔG/ΔG