

Electronic Supplementary Material

KIR2DL2/C1 Is a Risk Factor for Chronic Infection and Associated With Non-Response to PEG-IFN and RBV Combination Therapy in Hepatitis C Virus Genotype 1b Patients in China

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Supplementary Table S1. Frequency of *KIR* genes in HCV and healthy patients

KIR Gene	KIR Gene Carrier Frequency		P Value	Odds Ratio(95% CI)
	HCV Patients Observed/N (%)	Healthy controls Observed/N (%)		
KIR2DL1	331/333 (99.4)	316/320 (98.75)	0.385	2.095 (0.381–11.518)
KIR2DL2	186/333 (55.86)	94/320 (29.38)	<u>< 0.001</u>	<u>3.042 (2.201–4.204)</u>
KIR2DL3	329/333 (98.80)	319/320 (99.69)	0.193	0.258 (0.029–2.319)
KIR2DL4	333/333 (100.00)	320/320 (100.00)	Not analyzed	
KIR2DL5	146/333 (43.84)	142/320 (44.38)	0.891	0.979 (0.719–1.333)
KIR3DL1	327/333 (98.20)	312/320 (97.50)	0.538	1.397 (0.479–4.073)
KIR3DL2	333/333 (100.00)	320/320 (100.00)	Not analyzed	
KIR3DL3	333/333 (100.00)	320/320 (100.00)	Not analyzed	
KIR2DS1	127/333 (38.14)	116/320 (36.25)	0.618	1.084 (0.789–1.489)
KIR2DS2	101/333 (30.33)	88/320 (27.50)	0.425	1.148 (0.818–1.611)
KIR2DS3	107/333 (32.13)	77/320 (24.06)	<u>0.022</u>	<u>1.494 (1.059–2.108)</u>
KIR2DS4	173/333 (51.95)	281/320 (87.81)	<u>< 0.001</u>	<u>0.150 (0.101–0.223)</u>
KIR2DS5	76/333 (22.82)	71/320 (22.19)	0.846	1.037 (0.718–1.498)
KIR3DS1	137/333 (41.14)	117/320 (36.56)	0.230	1.213 (0.885–1.662)
KIR2DP1	333/333 (100.00)	320/320 (100.00)	Not analyzed	
KIR3DP1	333/333 (100.00)	320/320 (100.00)	Not analyzed	

Supplementary Table S2. Frequency of *KIR* genes in NR and SVR HCV patients

KIR Gene	KIR Gene Carrier Frequency		P Value	Odds Ratio (95% CI)
	NR Patients Observed/N (%)	SVR Patients Observed/N (%)		
KIR2DL1	35/36 (97.22)	61/62 (98.39)	0.694	0.574 (0.035–9.462)
KIR2DL2	26/36 (72.22)	32/62 (51.61)	<u>0.045</u>	<u>2.438 (1.008–5.895)</u>
KIR2DL3	35/36 (97.22)	62/62 (100.00)	0.187	0.972 (0.920–1.027)
KIR2DL4	36/36 (100.00)	62/62 (100.00)	Not analyzed	
KIR2DL5	12/36 (33.33)	24/62 (38.71)	0.595	0.792 (0.335–1.873)
KIR3DL1	35/36 (97.22)	61/62 (98.39)	0.694	0.574 (0.035–9.462)
KIR3DL2	36/36 (100.00)	62/62 (100.00)	Not analyzed	
KIR3DL3	36/36 (100.00)	62/62 (100.00)	Not analyzed	
KIR2DS1	12/36 (33.33)	25/62 (40.32)	0.491	0.740 (0.313–1.747)
KIR2DS2	8/36 (22.22)	16/62 (25.81)	0.691	0.821 (0.311–2.167)
KIR2DS3	9/36 (25.00)	17/62 (27.42)	0.794	0.882 (0.345–2.255)
KIR2DS4	32/36 (88.89)	61/62 (98.39)	<u>0.039</u>	<u>0.131 (0.014–1.223)</u>
KIR2DS5	10/36 (27.78)	21/62 (33.87)	0.532	0.751 (0.306–1.845)
KIR3DS1	17/36 (47.22)	30/62 (48.39)	0.911	0.954 (0.419–2.172)
KIR2DP1	36/36 (100.00)	62/62 (100.00)	Not analyzed	
KIR3DP1	36/36 (100.00)	62/62 (100.00)	Not analyzed	

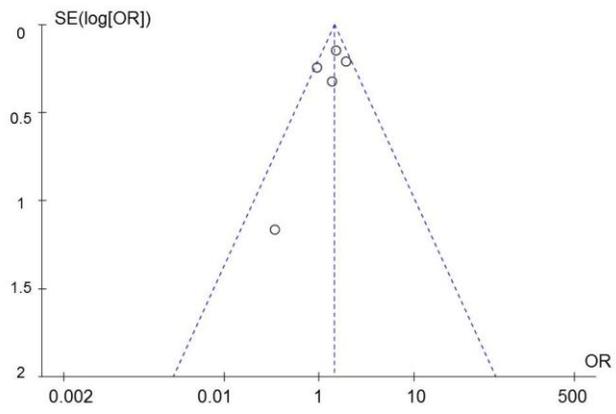
Supplementary Table S3. Meta-analysis of the occurrence of *KIR2DL2* in NR and SVR HCV patients

First Author	Year	Source	NR		SVR		Weight (%)	Odds Ratio (95% CI) ^a M-H, Fixed
			KIR2DL2+	Total	KIR2DL2+	Total		
Carneiro	2010	<i>Liver international</i>	43	101	23	66	0.149	1.39 (0.73, 2.63)
Vidal-Castineira	2010	<i>JVI</i>	84	154	83	218	0.257	1.95 (1.28, 2.97)
Dring	2011	<i>PNAS</i>	73	155	57	118	0.221	0.95 (0.59, 1.54)
De Vasconcelos	2013	<i>GMB</i>	22	26	16	17	0.016	0.34 (0.04, 3.37)
Vidal-Castineira	2014	<i>Plos One</i>	323	498	172	313	0.357	1.51 (1.13, 2.02)
Total (95% CI)				934		732	1	1.41 (1.05, 1.88)
Total events			545		351			

Heterogeneity: $Chi^2 = 6.51$, $df = 4$ ($P = 0.16$); $I^2 = 39\%$

Test for overall effect: $Z = 3.59$ ($P = 0.0003$)

a: a significant association of *KIR2DL2* gene with no response to therapy was detected under the Mantel-Haenszel test (M-H) of fixed effect model.



Supplementary Figure S1. Funnel plot analysis to detect publication bias using Egger's linear regression test