Outcome variables

Virological response to HCV treatment was estimated by detection of plasma HCV viral load at different endpoints. The following on-treatment virological responses were assessed: a) rapid virological response (RVR): no detectable viral load (<10 IU/mL) after 4 weeks of treatment; b) early virological response (EVR): viral load dropped by 99% (2 $\log_{10}$); c) end-of-treatment virological response (EOTVR): no detectable viral load at completion of treatment; d) sustained virological response (SVR): no detectable viral load six months after treatment cessation. Once treatment has been initiated, an undetectable plasma HCV RNA level at week 4 is the best predictor of cure. Thus, we also looked at the SVR among HIV/HCV coinfected patients without RVR (SVR/no-RVR).

We also defined several patterns of virological failure to HCV therapy related to plasma HCV kinetics: a) partial responder (partial-R) is someone who has had EVR but does not achieve SVR; b) relapser is a patient who has had EOTVR but whose HCV viral load rebounded after they completed HCV treatment. Null-responder (non-EVR) and non-responder (non-SVR) were not analyzed because these failure patterns are complementary of EVR and SVR, respectively.

HLA-E and IL28B alleles are associated with response rates to HCV treatment

The rates of virological response at different endpoints according to *HLA-E* and *IL28B* genotypes are shown in **Supplementary data** (**SD)1**. We found a significant positive trend of achieving the four efficacy endpoints of HCV treatment (RVR, EVR, EOTVR, and SVR) and SVR/no-RVR as the number of *HLA-E*0101* alleles increased. We also found that the rates of virological response at different end-points were higher in patients with favorable *IL28B* genotype (rs8099917 TT) compared to patients with unfavorable *IL28B* genotype (rs8099917 GG/GT) (**SD1**). In addition, these rates of virological response were similar for *HLA-E*0101/*0101* and rs8099917 TT patients. In contrast, we found a significant negative association of being a partial-R or relapser with the presence of *HLA-E*0101/*0101* but not with rs8099917 TT genotype (**SD1**).

As expected, we found that patients infected with GT1/4 had lower rates of virological response than patients infected with HCV genotypes 2 or 3 (GT2/3) (*data not shown*). We also found that rs8099917 TT was associated with virological response only in GT1/4 patients, but not in GT2/3 patients (**SD2**). However, when we analyzed the influence of *HLA-E* genotypes, we observed that *HLA-E*0101* allele was associated with virological response in both groups of patients according to HCV-genotype (GT1/4 versus GT2/3 patients; **SD3**) and *IL28B* genotype (rs8099917 TG/GG versus rs8099917 TT; **SD4**).

Supplementary data 1. Virological response rates during HCV treatment among HIV/HCV coinfected patients according to *HLA-E* alleles and *IL28B* genotypes.

	HLA-E					**rs8099917 *IL28B***				
rs8099917 *IL28B*	***0103/*0103**	***0101/*0103**	***0101/*0101**	**γ**	**(*) p-value**	**GG**	**GT**	**TT**	**γ**	**(*) p-value**
Virological response										
RVR (n=225)	4 (12.5%)	23 (26.4%)	49 (46.2%)	0.483	**<0.001**	2 (28.6%)	18 (22.8%)	56 (39.7%)	0.350	**0.009**
EVR (n=288)	22 (53.7%)	78 (70.9%)	108 (78.8%)	0.320	**0.004**	6 (66.7%)	55 (55.6%)	150 (82%)	0.520	**<0.001**
EOTVR (n=316)	19 (41.3%)	78 (61.9%)	110 (76.4%)	0.422	**<0.001**	4 (44.4%)	51 (46.8%)	152 (75.2%)	0.535	**<0.001**
SVR (n=321)	9 (19.6%)	70 (54.3%)	102 (69.9%)	0.511	**<0.001**	4 (44.4%)	40 (35.7%)	136 (66.3%)	0.525	**<0.001**
SVR/no-RVR (n=149)	3 (10.7%)	28 (43.8%)	30 (52.6%)	0.456	**<0.001**	1 (20%)	15 (24.6%)	43 (50.6%)	0.510	**0.001**
HCV treatment failure										
Partial-R (n=208)	13 (59.1%)	17 (21.8%)	13 (12%)	-0.548	**<0.001**	2 (33.3%)	17 (30.9%)	29 (19.3%)	-0.297	0.082
Relapser (n=207)	10 (52.6%)	11 (14.1%)	9 (8.2%)	-0.562	**0.001**	0 (0%)	11 (21.6%)	20 (13.2%)	-0.222	0.290

In bold, p-values with statistical significance.

Abbreviations: RVR, rapid virological response; EVR, early virological response; EOTVR, end-of-treatment virological response; SVR, sustained virological response; partial-R, partial responder; HCV, Hepatitis C virus; HCV-RNA, HCV plasma viral load; HIV, Human immunodeficiency virus; p: significance value; γ, gamma correlation coefficient.

(*), The test used to analyze the trend of data was the gamma correlation coefficient (γ; values between -1 and +1), a non-parametric test for measuring the correlation between two ordinal variables.

Supplementary data 2. Virological response rates during HCV treatment in HIV/HCV coinfected patients on HCV treatment according to rs8099917 *IL28B* and HCV genotypes.

	HCV genotype 1/4					HCV genotype 2/3				
rs8099917 *IL28B*	**GG**	**GT**	**TT**	**γ**	**(*) p-value**	**GG**	**GT**	**TT**	**γ**	**(*) p-value**
Virological response										
RVR (n=225)	0 (0%)	8 (13.6%)	24 (27.2%)	0.460	**0.012**	2 (100%)	10 (52.6%)	32 (60.3%)	0.032	0.898
EVR (n=288)	3 (50)%	35 (45.5%)	84 (75%)	0.531	<0.001	3 (100%)	19 (90.5%)	66 (93%)	0.065	0.880
EOTVR (n=316)	1 (16.7%)	32 (37.6%)	83 (65.9%)	0.543	**0.001**	3 (100%)	18 (78.3%)	69 (90.8%)	0.361	0.262
SVR (n=321)	1 (16.7%)	22 (25%)	70 (55.1%)	0.573	**<0.001**	3 (100%))	17 (73.9%)	66 (84.6%)	0.211	0.452
SVR/no-RVR (n=149)	1 (20%)	9 (17.6%)	26 (40.6%)	0.490	**0.005**	0 (0%)	5 (55.6%)	17 (81%)	0.545	0.183
HCV treatment failure										
Partial-R (n=208)	2 (66.7%)	14 (40%)	23 (27.4%)	-0.324	0.103	0 (0%)	3 (15.8%)	6 (9.1%)	-0.188	0.619
Relapser (n=207)	0 (0%)	10 (31.3%)	15 (18.1%)	-0.314	0.190	0 (0%)	1 (5.6%)	5 (7.2%)	0.234	0.622

In bold, values with statistical significance.

Abbreviations: RVR, rapid virological response; EVR, early virological response; EOTVR, end-of-treatment virological response; SVR, sustained virological response; partial-R, partial responder; HCV, Hepatitis C virus; HCV-RNA, HCV plasma viral load; HIV, Human immunodeficiency virus; p: significance value; γ, gamma correlation coefficient.

(*), The test used to analyze the trend of data was the gamma correlation coefficient (γ; values between -1 and +1), a non-parametric test for measuring the correlation between two ordinal variables.

Supplementary data 3. Virological response rates during HCV treatment in HIV/HCV coinfected patients on HCV treatment according to *HLA-E* and HCV genotypes.

	HCV genotype 1/4					HCV genotype 2/3				
***HLA-E* genotypes**	***0103/*0103**	***0101/*0103**	***0101/*0101**	**γ**	**(*) p-value**	***0103/*0103**	***0101/*0103**	***0101/*0101**	**γ**	**(*) p-value**
Virological response										
RVR (n=225)	4 (14.3%)	7 (13%)	22 (32.8%)	0.434	**0.009**	0 (0%)	16 (48.5%)	27 (71.1%)	0.564	**0.003**
EVR (n=288)	19 (51.4%)	41 (59.4%)	59 (68.6%)	0.232	0.059	3 (75%)	37 (90.2%)	48 (96%)	0.501	0.173
EOTVR (n=316)	18 (43.9%)	39 (47.6%)	59 (65.6%)	0.307	**0.006**	1 (20%)	39 (86.6%)	50 (94.3%)	0.658	**0.021**
SVR (n=321)	9 (22%)	32 (38.6%)	52 (56.5%)	0.436	**<0.001**	0 (0%)	38 (82.6%)	49 (92.5%)	0.689	**0.004**
SVR/no-RVR (n=149)	3 (12.5%)	14 (29.8%)	19 (42.2%)	0.419	**0.007**	0 (0%)	14 (82.4%)	10 (90.9%)	0.800	**0.009**
HCV treatment failure										
Partial-R (n=208)	10 (52.6%)	14 (34.1%)	11 (18.6%)	-0.463	**0.004**	3 (100%)	3 (8.1%)	2 (4.1%)	-0.695	0.051
Relapser (n=207)	9 (50%)	89 (20.5%)	8 (13.6%)	-0.490	**0.010**	1 (100%)	3 (7.7%)	1 (2%)	-0.731	0.107

In bold, values with statistical significance.

Abbreviations: RVR, rapid virological response; EVR, early virological response; EOTVR, end-of-treatment virological response; SVR, sustained virological response; Full-R, full responder; partial-R, partial responder; OR, odds ratio; 95% CI, 95% of confidence interval; HCV, Hepatitis C virus; HCV-RNA, HCV plasma viral load; HIV, Human immunodeficiency virus; p: significance value; γ, gamma correlation coefficient.

(*), The test used to analyze the trend of data was the gamma correlation coefficient (γ; values between -1 and +1), a non-parametric test for measuring the correlation between two ordinal variables.

Supplementary data 4. Virological response rates during HCV treatment in HIV/HCV coinfected patients on HCV treatment according to *HLA-E* and *IL28B* genotypes.

	rs8099917 (GT/GG)					rs8099917 (TT)				
***HLA-E* genotypes**	***0103/*0103**	***0101/*0103**	***0101/*0101**	**γ**	**(*) p-value**	***0103/*0103**	***0101/*0103**	***0101/*0101**	**γ**	**(*) p-value**
Virological response										
RVR (n=225)	2 (10%)	6 (17.1%)	12 (41.4%)	0.552	**0.006**	2 (16.7%)	17 (32.7%)	36 (48.6%)	0.387	**0.010**
EVR (n=288)	10 (38.5%)	24 (53.3%)	25 (71.4%)	0.408	**0.006**	12 (80%)	54 (83.1%)	80 (80.8%)	-0.039	0.827
EOTVR (n=316)	9 (31%)	21 (41.2%)	25 (69.4%)	0.471	**0.001**	10 (58.8%)	57 (76%)	82 (78.1%)	0.175	0.252
SVR (n=321)	4 (13.8%)	17 (32.7%)	23 (62.2%)	0.612	**<0.001**	5 (29.4%)	53 (68.8%)	76 (71.7%)	0.289	**0.034**
SVR/no-RVR (n=149)	2 (11.1%)	6 (20.7%)	8 (41.7%)	0.551	**0.014**	1 (10%)	22 (62.9%)	20 (52.6%)	0.198	0.294
HCV treatment failure										
Partial-R (n=208)	6 (60%)	8 (33.3%)	3 (12%)	-0.629	**0.003**	7 (58.3%)	9 (16.7%)	10 (12.5%)	-0.449	**0.023**
Relapser (n=207)	5 (55.6%)	4 (19%)	2 (8%)	-0.669	**0.011**	5 (50%)	7 (12.3%)	7 (8.5%)	-0.465	**0.044**

In bold, values with statistical significance.

Abbreviations: RVR, rapid virological response; EVR, early virological response; EOTVR, end-of-treatment virological response; SVR, sustained virological response; Full-R, full responder; partial-R, partial responder; OR, odds ratio; 95% CI, 95% of confidence interval; HCV, Hepatitis C virus; HCV-RNA, HCV plasma viral load; HIV, Human immunodeficiency virus; p: significance value; γ, gamma correlation coefficient.

(*), The test used to analyze the trend of data was the gamma correlation coefficient (γ; values between -1 and +1), a non-parametric test for measuring the correlation between two ordinal variables.