

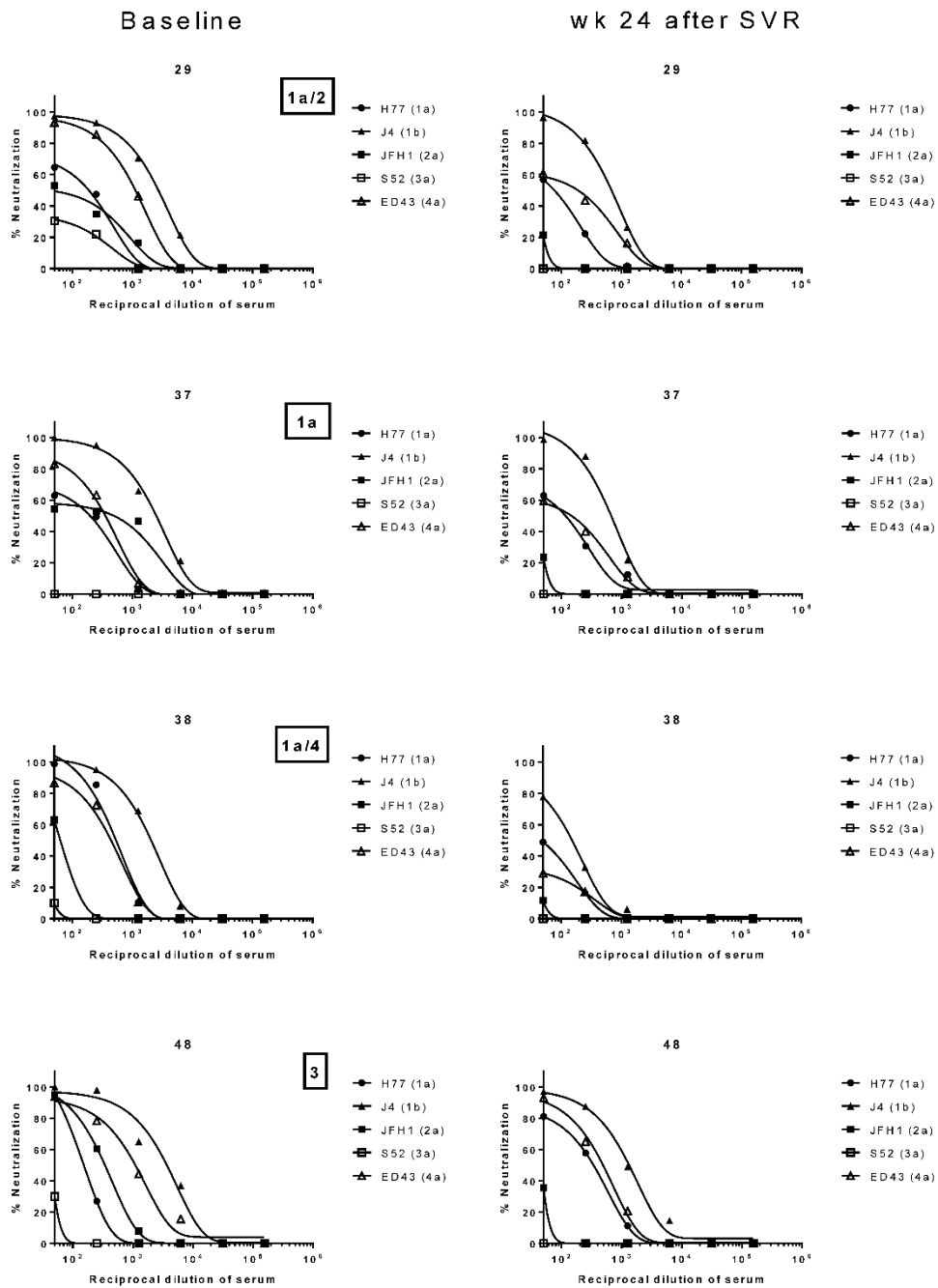
**Title:** Rapid decrease in titer and breadth of neutralizing anti-HCV antibodies in HIV/HCV-coinfected patients who achieved SVR

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(&), these authors contributed equally to this work. (\*), corresponding author.

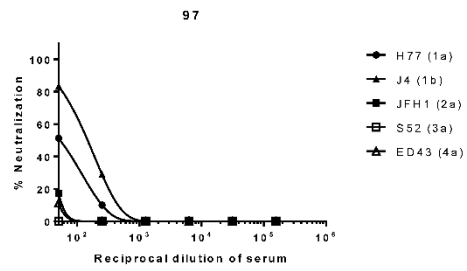
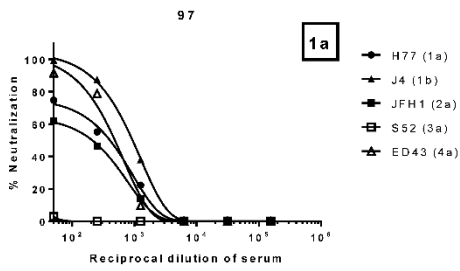
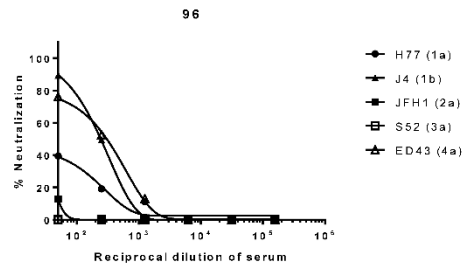
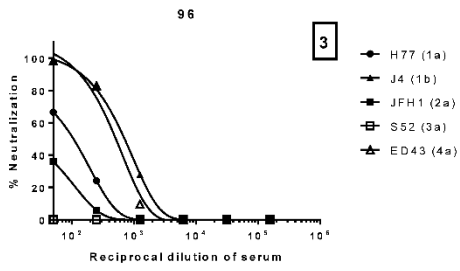
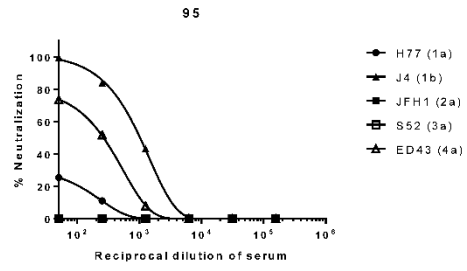
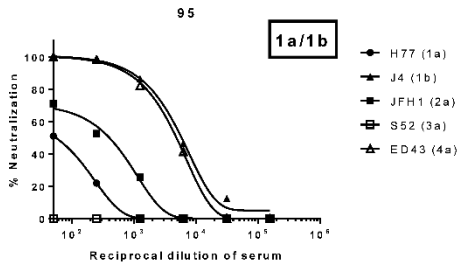
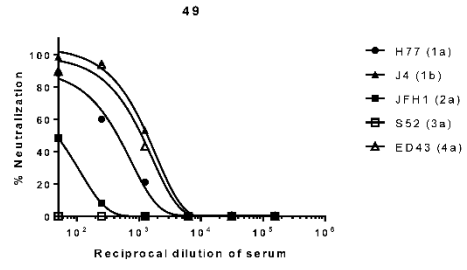
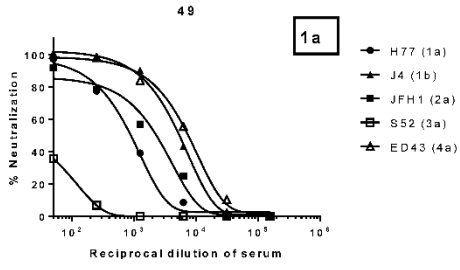
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**Supplementary Figure 1.** Neutralization potency and breadth of HCV antibodies against a panel of five JFH1-based chimeric HCVs expressing E1 and E2 glycoproteins from 1a (H77), 1b (J4), 2a (JFH1), 3a (S52) and 4a (ED43) genotypes from 29 HIV/HCV-coinfected patients, at baseline and 24 weeks after sustained virological response (SVR). Patient numbers and HCV genotypes (open squares) are shown. Curves represent one phase exponential decay least squares fit.



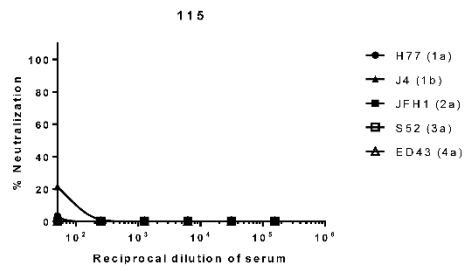
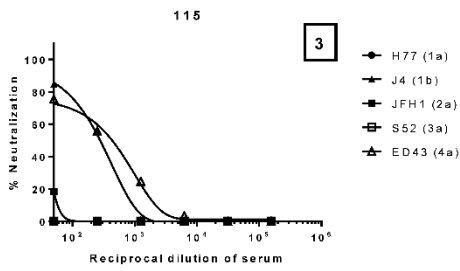
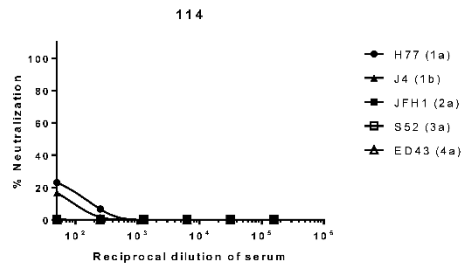
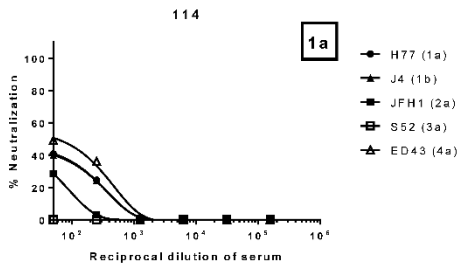
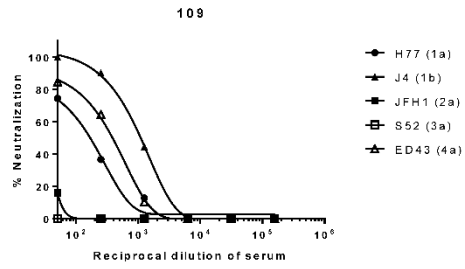
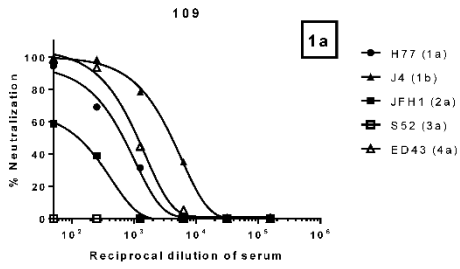
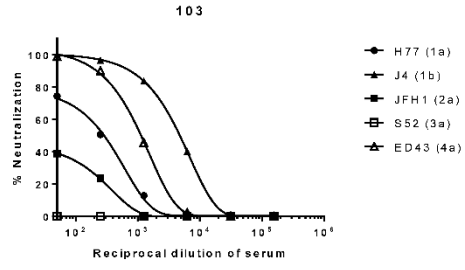
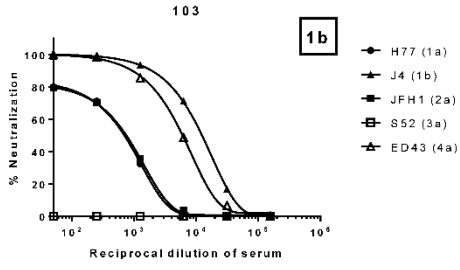
Baseline

wk 24 after SVR



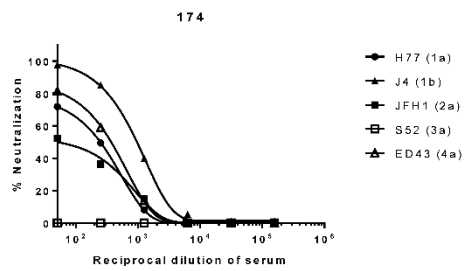
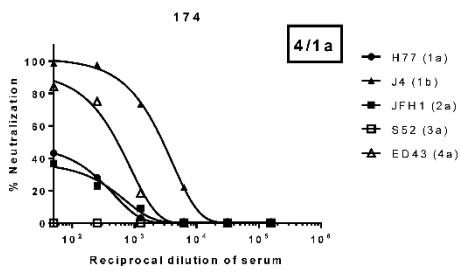
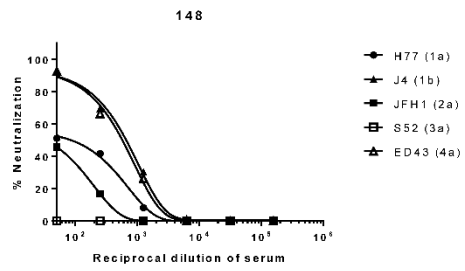
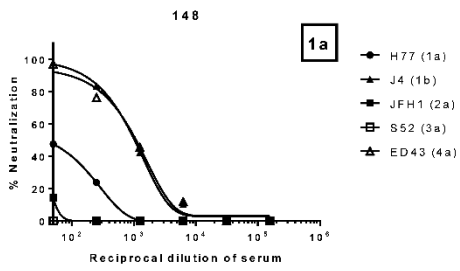
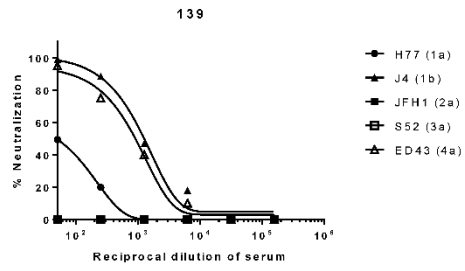
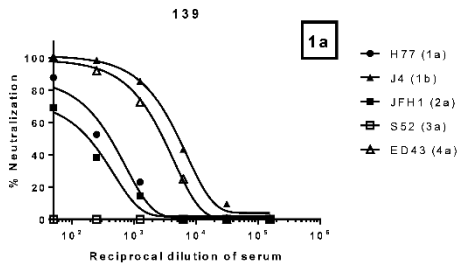
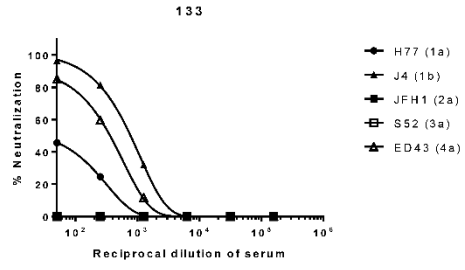
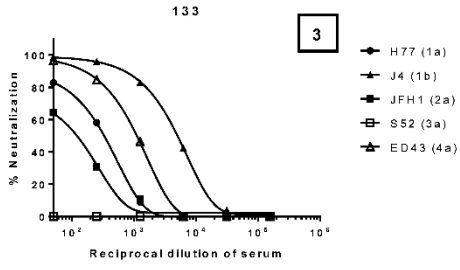
Baseline

wk 24 after SVR



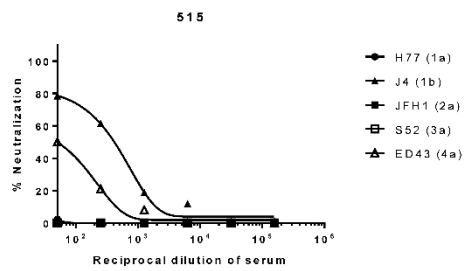
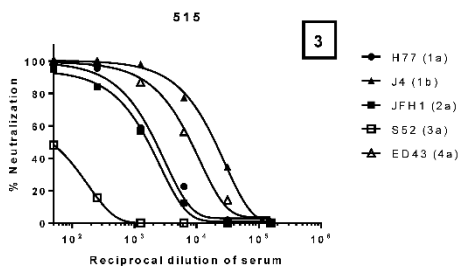
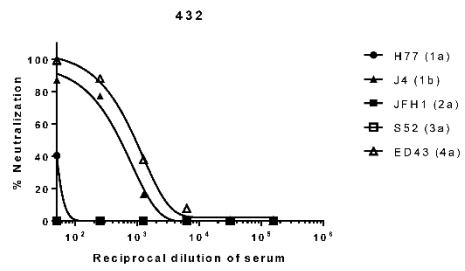
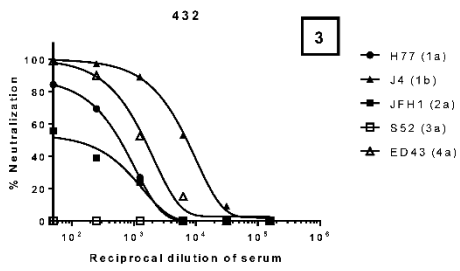
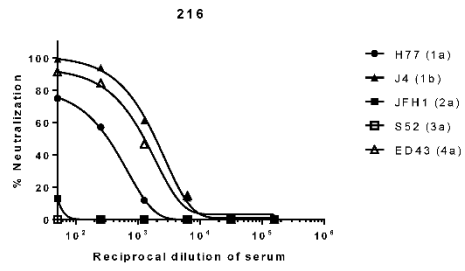
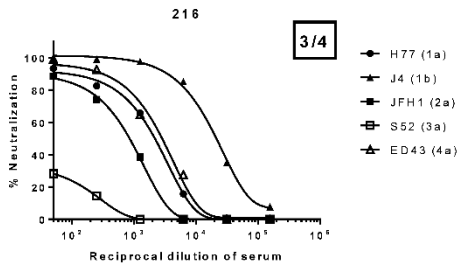
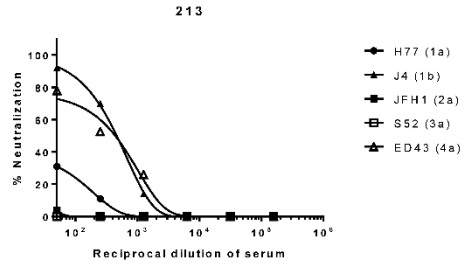
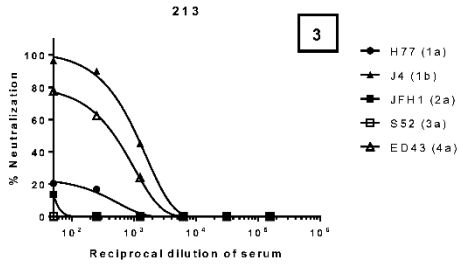
Baseline

wk 24 after SVR

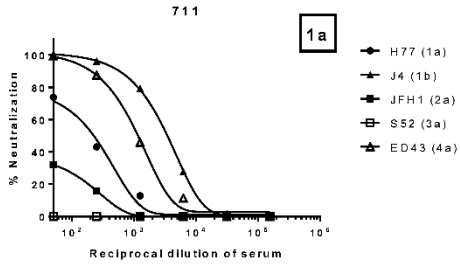


Baseline

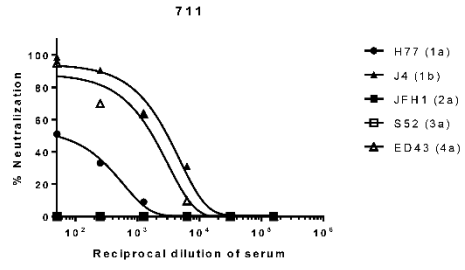
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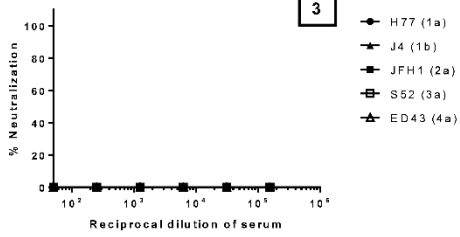
Baseline



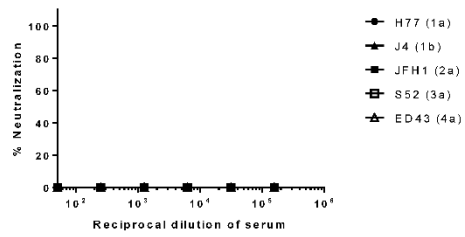
wk 24 after SVR



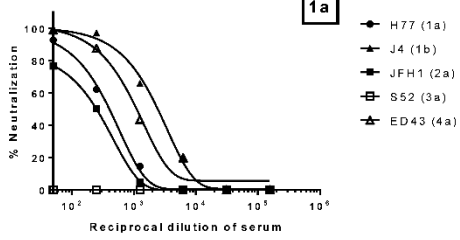
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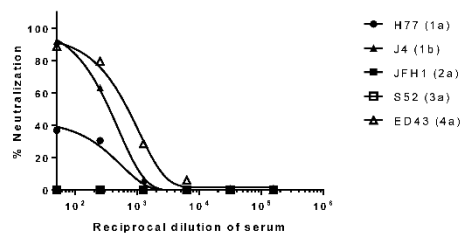
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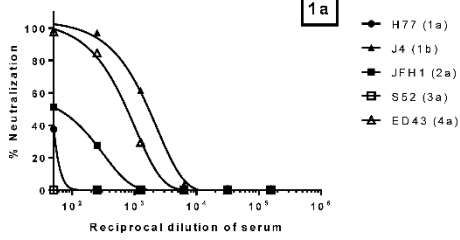
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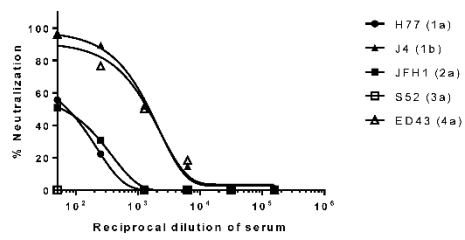
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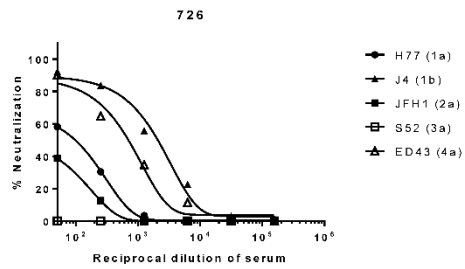
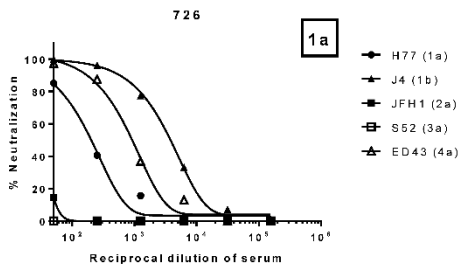
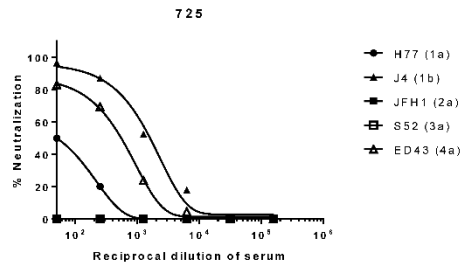
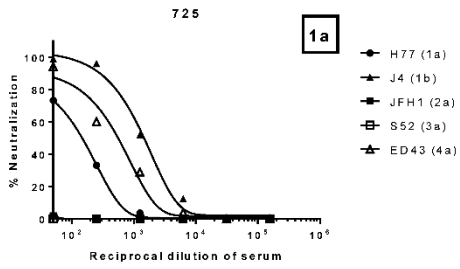
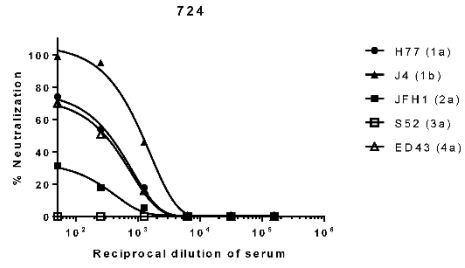
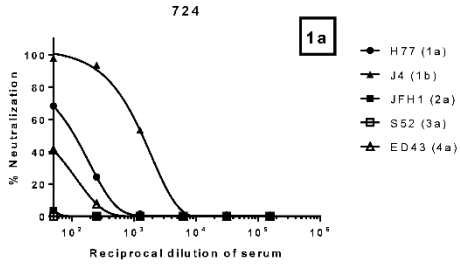
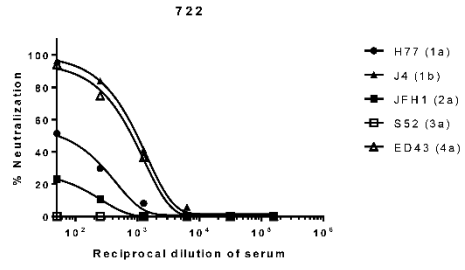
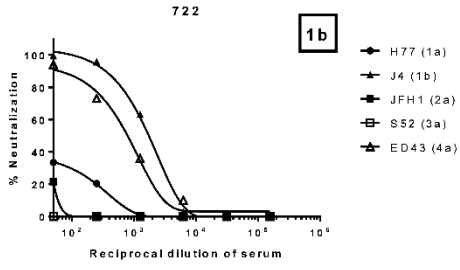


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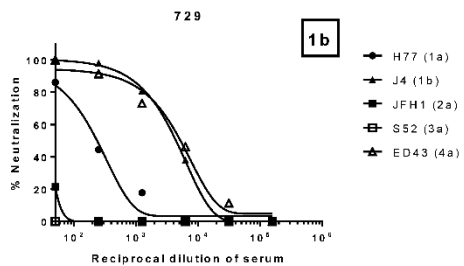
Baseline

wk 24 after SVR

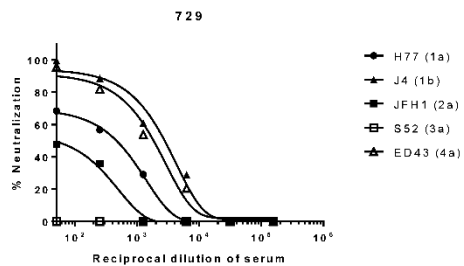




### Baseline

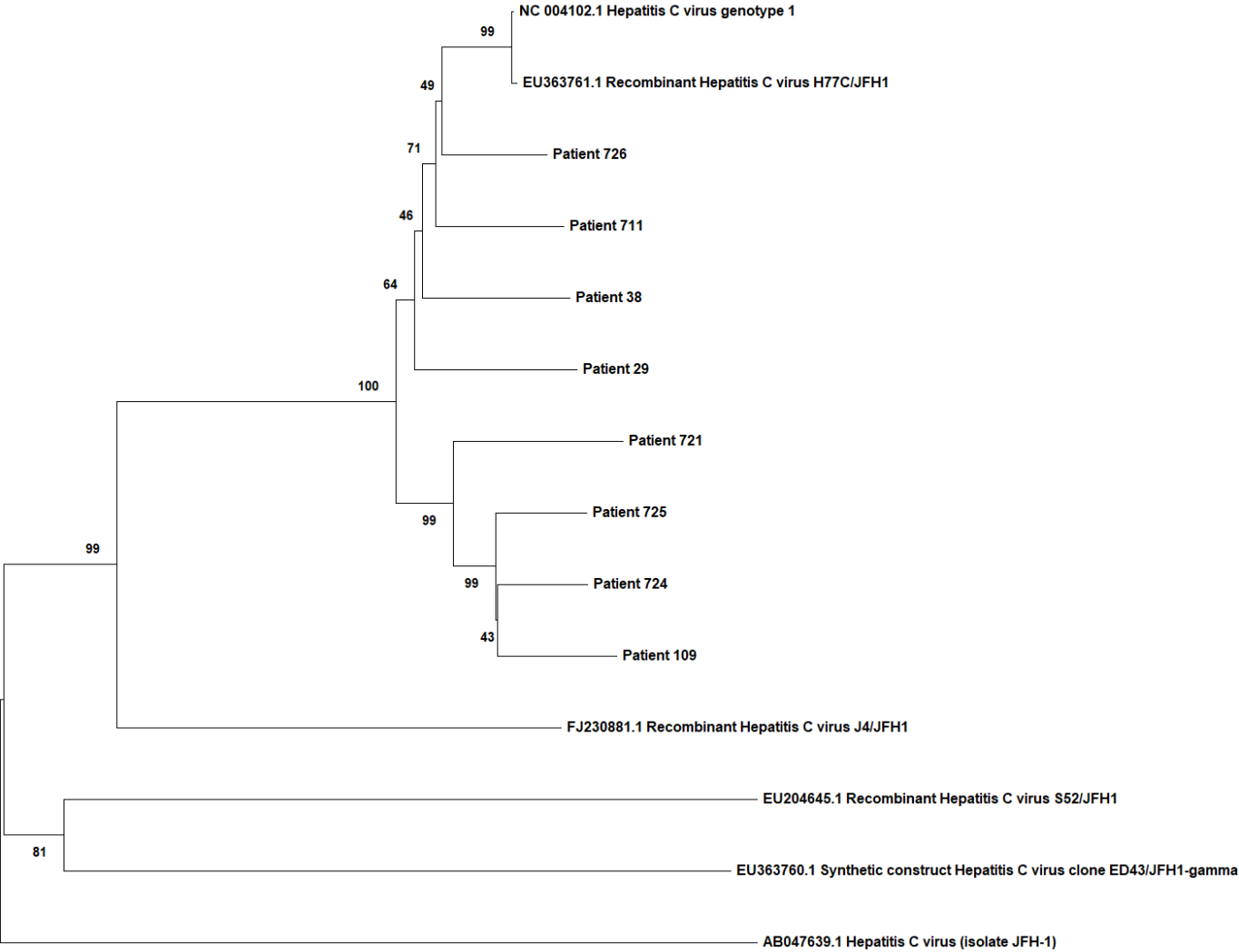


### wk 24 after SVR



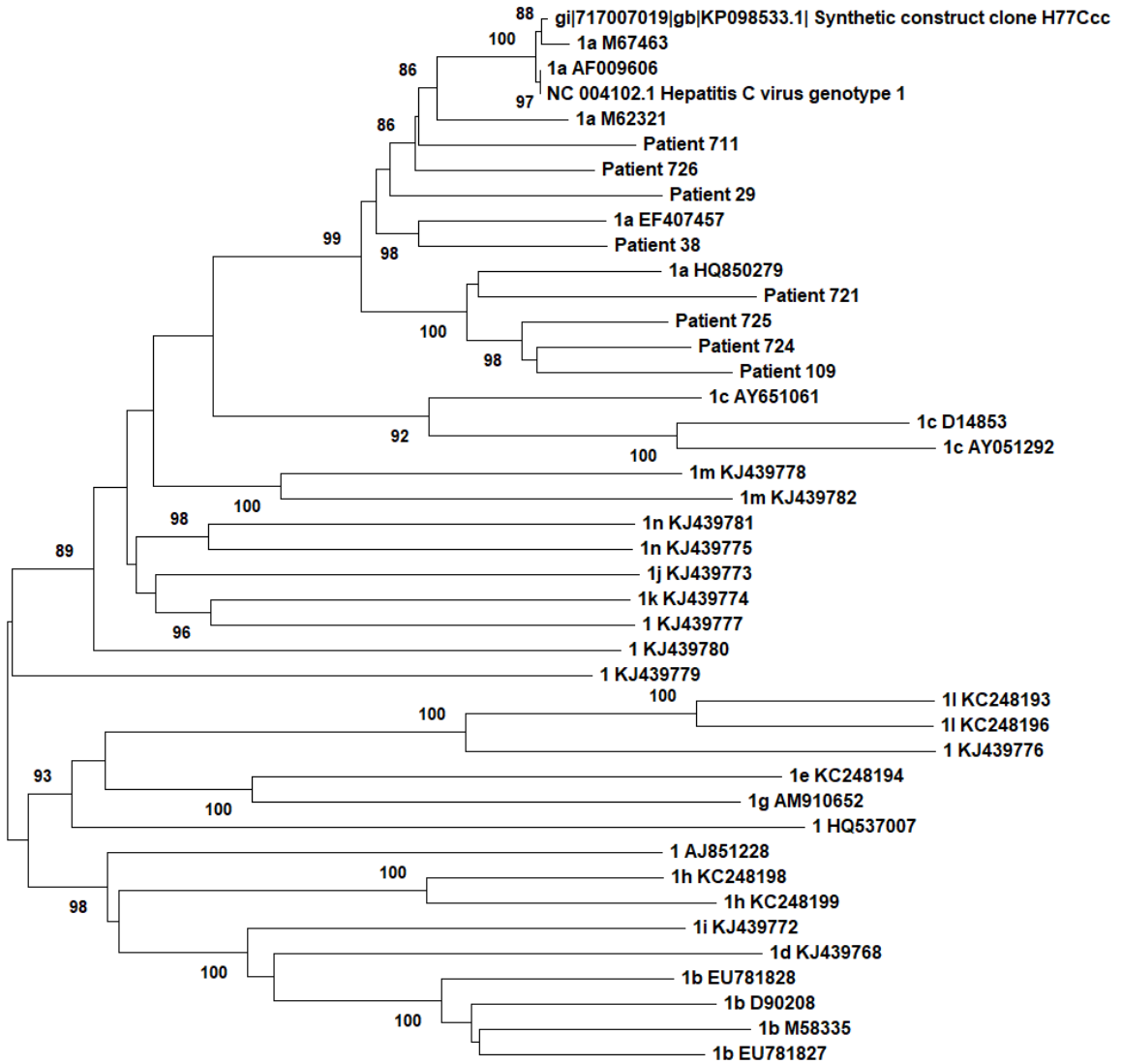
**Supplementary Figure 2.** Phylogenetic analyses of E1E2 nucleotide sequences from A) chimeric HCV and HCV GT1a infected patients and B) HCV GT1 and HCV GT1a infected patients. The percentage of replicate trees in which the associated virus clustered together in the bootstrap test (1000 replicates) are shown next to the branches.

**A**



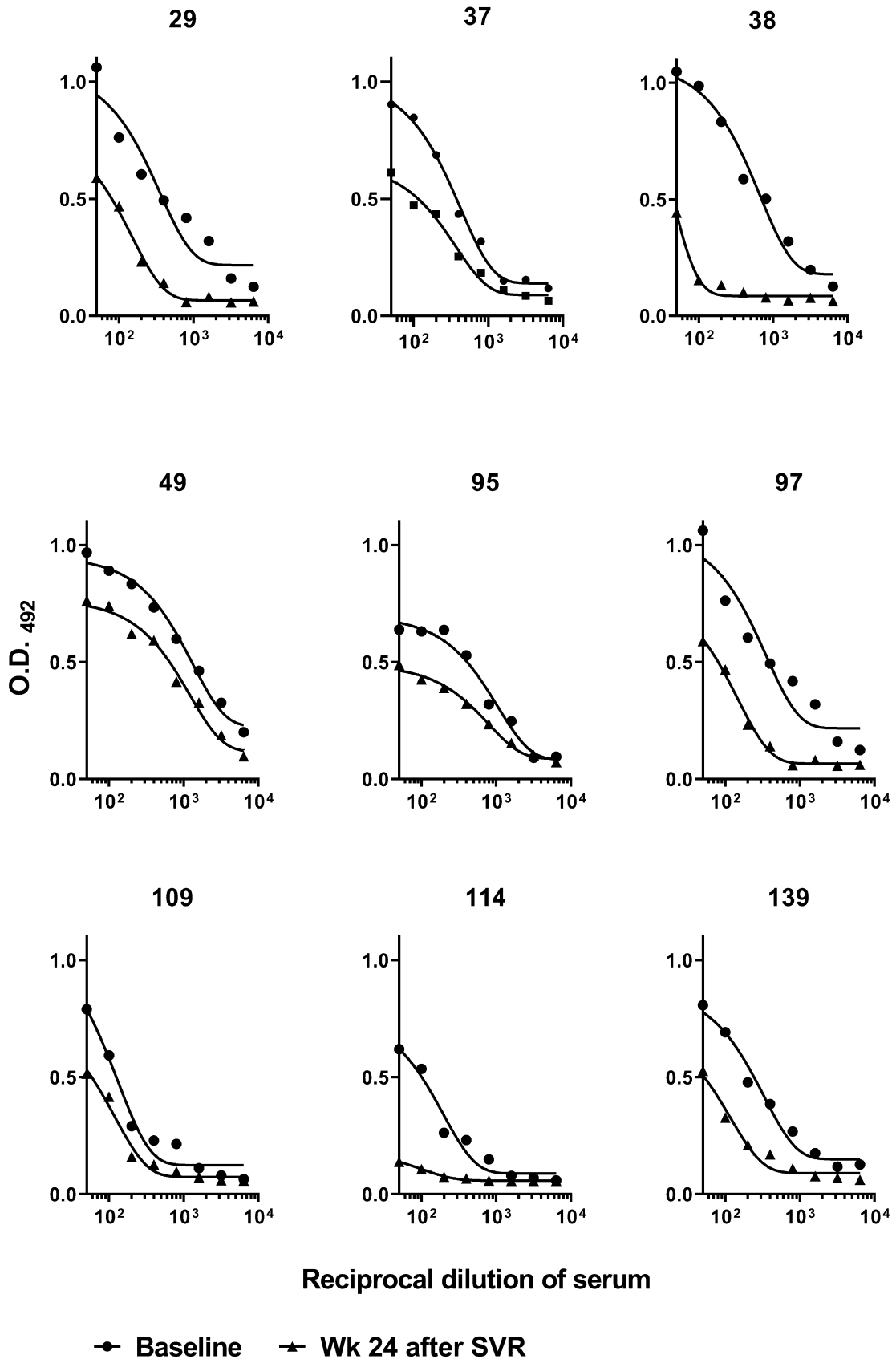
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**B**

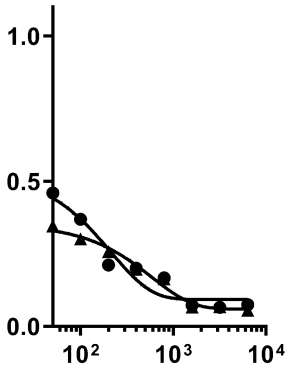


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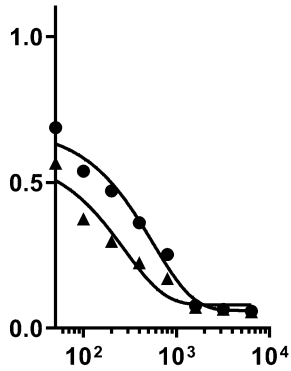
**Supplementary Figure 3.** Antibody titers against the E2 glycoprotein of H77 (HCV-GT1a). Serial dilutions (dilution factor 2, initial dilution 1:50) of plasma samples were tested against purified E2 glycoprotein by an enzyme-linked immunosorbent assay (ELISA). Patient numbers are shown. Curves represent one phase exponential decay least squares fit.



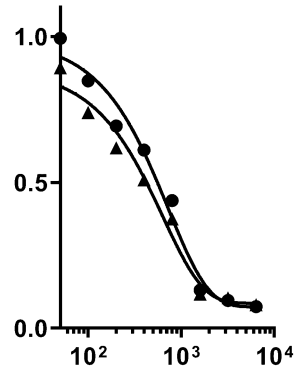
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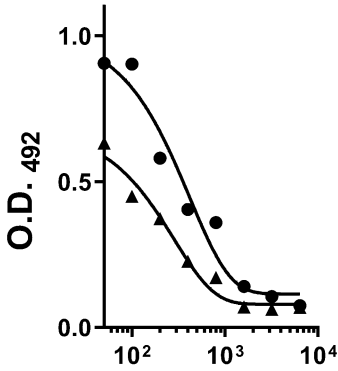
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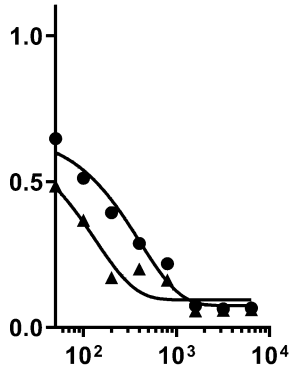
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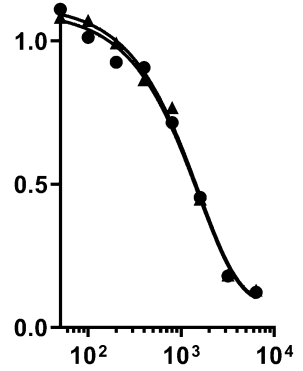
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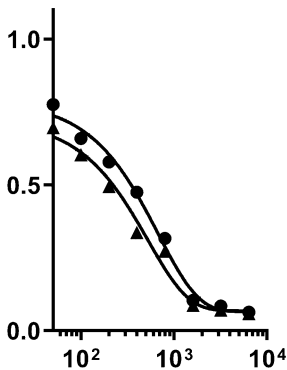
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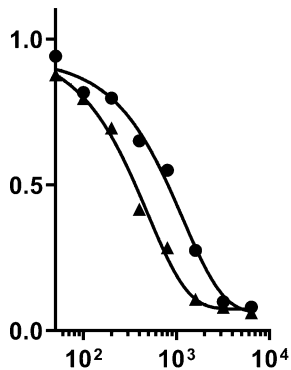
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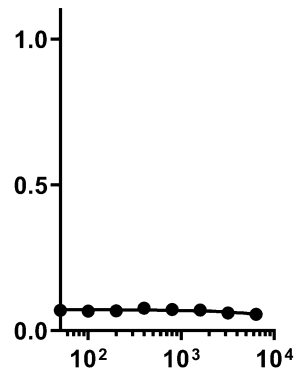
725



726



Control



Reciprocal dilution of serum

● Baseline    ▲ Wk 24 after SVR

**Supplementary Table 1.** AUC values against recombinant viruses at baseline and at week 24 after SVR in HIV/HCV-coinfected study patients.

Patient #	Genotype	H77 (1a)		J4 (1b)		JFH1 (2a)		S52 (3a)		ED43 (4a)	
		Baseline	Week 24 after SVR	Baseline	Week 24 after SVR	Baseline	Week 24 after SVR	Baseline	Week 24 after SVR	Baseline	Week 24 after SVR
29	1a / 2	34970	24100	597330	138000	75320	2150	16270	0	199300	81450
37	1a	723640	230	4120000	281140	413950	0	14240	0	2239840	41600
38	1a / 4	71940	51970	866620	722600	12800	0	0	0	371440	387130
48	3	167550	67800	828920	197920	29270	1600	0	0	279510	78240
49	1a	38360	17060	410820	486060	190	0	0	0	192550	189080
95	1a / 1b	18240	9140	1956040	190500	115170	0	0	0	936520	61770
96	3	21110	48710	142310	38640	7140	1280	0	0	88230	78040
97	1a	107130	11060	176740	25670	75960	1730	290	0	85210	1110
103	1b	44320	62200	583600	127460	176730	2340	0	0	66670	62650
109	1a	30470	61420	618680	259660	44410	72060	0	0	108900	84940
114	1a	491440	77440	4752450	448990	168810	1290	11400	0	672060	420000
115	3	25600	93080	226150	212760	370	29940	0	0	8660	85420
133	3	92140	14800	396760	45760	37920	1180	1000	0	83620	13160
139	1a	19030	54740	344900	164950	1440	14650	0	0	370770	127930
148	1a	15650	47620	300770	272040	2160	8790	0	0	311200	164320
174	4 / 1a	25720	76390	818800	426700	69470	3550	3000	0	423500	110110
213	3	302530	108220	1227940	226780	600440	9700	7640	0	1927420	195500
216	3 / 4	70200	19390	1259620	154260	57920	0	0	0	199600	79670
432	3	0	0	0	0	0	0	0	0	0	0
515	3	12190	9760	199200	93740	1380	380	0	0	117130	117290
711	1a	188730	76200	2680110	922120	214880	18030	0	0	1551220	233750
718	3	3750	18880	301860	439680	21600	23560	0	0	148950	481490
719	1a	130780	4050	1825180	104530	100740	0	0	0	449400	292230
721	1a	18770	6260	18620	2630	4720	50	0	0	26580	1
722	1b	0	330	45240	2740	1840	0	0	0	164260	1
724	1a	109270	16820	1690600	474000	73160	1	0	0	657580	324500
725	1a	79660	33960	1337920	783350	1450	11360	0	0	369420	322990
726	1a	88650	128160	881750	681050	2150	26370	0	0	1826080	529100
729	1b	90390	22060	564350	65180	52970	1	0	0	490260	233940

**Abbreviations:** AUC, Area under the neutralization curve; SVR, sustained virological response.

**Supplementary Table 2.** ID50 values against recombinant viruses at baseline and at week 24 after SVR in HIV/HCV-coinfected study patients.

Patient #	Genotype	H77 (1a)		J4 (1b)		JFH1 (2a)		S52 (3a)		ED43 (4a)	
		Baseline	Week 24 after SVR	Baseline	Week 24 after SVR	Baseline	Week 24 after SVR	Baseline	Week 24 after SVR	Baseline	Week 24 after SVR
29	1a / 2	187.8	77.1	2699.9	688.1	0	0	0	0	1118.6	190.9
37	1a	2183.0	0	19760.3	413.1	1656.8	0	0	0	8080.0	1
38	1a / 4	224.4	0	3453.7	3060.6	0	0	0	0	1162.6	1756.5
48	3	671.7	167.8	4029.7	1093.6	124.9	0	0	0	1139.7	384.5
49	1a	147.3	50.0	1463.6	1600.2	0	0	0	0	558.8	549.2
95	1a / 1b	54.7	0	5840.7	1022.7	399.9	0	0	0	4831.2	263.6
96	3	106.2	0	707.6	242.9	0	0	0	0	511.5	303.9
97	1a	401.1	52.9	928.2	146.4	207.8	0	0	0	482.5	0
103	1b	195.9	115.7	2481.9	666.0	486.1	0	0	0	352.5	144.7
109	1a	0	246.1	2860.1	958.0	0	0	0	0	530.8	368.1
114	1a	2169.8	327.2	21285.0	1908.0	848.4	0	0	0	2841.3	1257.0
115	3	110.1	346.4	1365.8	1168.1	0	0	0	0	26.5	294.4
133	3	535.9	0	2056.2	152.8	63.3	0	0	0	443.1	0
139	1a	0	0	1026.7	660.2	0	0	0	0	1087.2	572.5
148	1a	0	50.6	1732.9	987.5	0	0	0	0	789.1	813.7
174	4 / 1a	152.2	339.5	3666.0	1327.6	342.0	0	0	0	1096.5	488.5
213	3	890.4	454.9	5399.1	1368.4	2296.9	0	0	0	7486.5	1108.1
216	3 / 4	330.0	0	5025.9	771.7	120.2	0	0	0	1111.2	360.8
432	3	0	0	0	0	0	0	0	0	0	0
515	3	0	0	1114.5	460.2	0	0	0	0	487.6	435.9
711	1a	697.1	285.8	12429.1	4755.3	750.9	0	0	0	6049.9	1129.8
718	3	0	73.1	1686.4	1507.7	57.0	0	0	0	752.7	1437.1
719	1a	596.9	0	7168.9	529.2	96.9	0	0	0	1507.8	936.8
721	1a	0	0	0	0	0	0	0	0	56.8	0
722	1b	0	0	277.7	0	0	0	0	0	432.9	0
724	1a	413.8	0	5299.1	1249.9	186.2	0	0	0	2981.5	901.2
725	1a	200.9	96.9	3784.1	2070.1	0	0	0	0	916.0	696.5
726	1a	236.4	464.6	4420.2	2772.1	0	0	0	0	5219.7	1839.0
729	1b	403.8	0	2435.3	354.3	250.2	0	0	0	1110.6	701.4

**Abbreviations:** ID50, 50% inhibitory dose; SVR, sustained virological response.

**Supplementary Table 3.** Relationship between the CD4/CD8 ratio and the HCV-nAb titers against recombinant viruses in HIV/HCV-coinfected study patients.

	HCV genotypes	AUC		ID50	
		r	p-value *	r	p-value *
At baseline	H77 (1a)	0.454	<b>0.013</b>	0.450	<b>0.014</b>
	J4 (1b)	0.248	0.194	0.246	0.198
	JFH1 (2a)	0.192	0.318	0.142	0.462
	S52 (3a)	0.042	0.830	-	-
	ED43 (4a)	0.002	0.992	0.125	0.519
At week 24 after SVR	H77 (1a)	-0.115	0.553	-0.056	0.772
	J4 (1b)	0.041	0.833	-0.082	0.671
	JFH1 (2a)	-0.133	0.492	-	-
	S52 (3a)	-	-	-	-
	ED43 (4a)	-0.158	0.414	-0.209	0.276

**Abbreviations:** HCV-nAbs, HCV neutralizing antibodies; r, Spearman correlation coefficient; AUC, area under the curve; ID50, 50% inhibitory dose; SVR, sustained virological response.

**Statistics:** p-values were calculated by the Spearman correlation coefficient.