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HIV/HCV co-infection across Europe

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Objectives

A large observational study is needed to monitor the uptake, efficacy, safety and clinical outcomes of direct-acting antivirals (DAAs) in unselected HIV/HCV co-infected patients in a real-life heterogeneous setting. In 2014, the EuroSIDA study began enrolment of a new cohort of 5,000 anti-HCV positive HIV patients from all European regions (South, Central West, North, Central East, East) plus Argentina **(Figure 1).**

The objective of this study is to describe the characteristics of patients co-infected with HIV and hepatitis C (HCV) prior to the introduction of effective DAAs.

Methods

Descriptive statistics were used to summarise characteristics of patients with HIV/HCV at baseline (latest of anti-HCV+, study recruitment or 1/1/2013).

Results

There were considerable differences among the 4608 persons included to date followed in different regions **(Table1)**. Compared with patients from other regions, patients from East were more likely to be injection drug users, younger, had lower CD4 and higher CD4 nadir, were less likely to be on cART, and among those on cART, less likely to have a viral load<500 copies/ml. The median CD4 cell count at starting cART (available for 3452) was 205 cells/mm^3 (IQR 95-315), and was ≤350 cells/mm^3 for 80.5%, ranging from 73.3% in South to 88.2% in East.

Table 2 describes the HCV characteristics of the cohort. Information on HCV genotype was available for 2534 (55.0%); GT1 (n=1360, 53.7%) was the most common. Of 3283 (71.3%) with HCV-RNA information, 2010 (61.2%) were HCV-RNA-positive, and 1287/2866 (44.6%) with quantified HCV-RNA had HCV RNA ≥500,000 IU/ml. 757 (16.4%) had ever been exposed to anti-HCV therapy (DAA, interferon), but only 35 (0.8%) to DAA. Of the 4069 (88.3%) with information on fibrosis, 3444 (84.6%) had F0/F1 fibrosis, and 125 (3.1%), 104 (2.6%) and 396 (9.7%) had F2, F3 or F4 fibrosis respectively. ≥F2 fibrosis was significantly more common in South (17.6%) and East (16.1%).

Discussion

This large cohort of HIV/HCV co-infected persons was largely naïve to DAA and had a low proportion of advanced fibrosis; persons on cART had good HIV virological control although cART was started at a low CD4 count. All patients will be followed up for at least five years or until the time of death or loss to follow up, and the cohort will be important for investigating outcomes associated with DAAs when introduced into a heterogeneous clinic population.

Figure 1

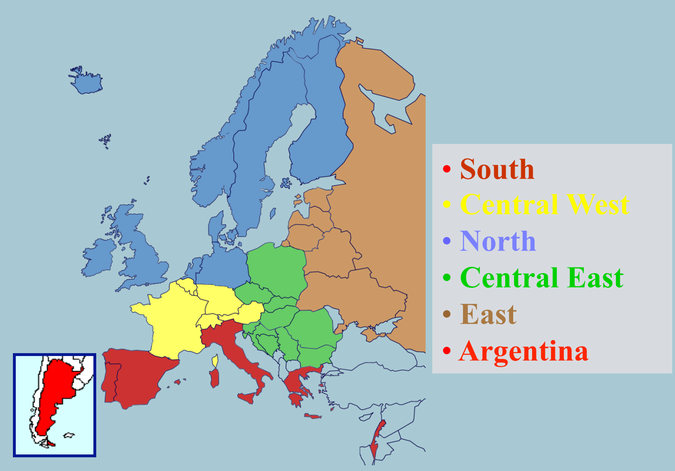

Table 1

Baseline characteristics of 4608 HIV/HCV co-infected individuals

	All	S	W	N	CE	E	Argentina
N (%)	4608	1183 (25.7)	573 (12.4)	624 (13.5)	854 (18.5)	1266 (27.5)	108 (2.3)
Male (%)	69.9	72.5	74.4	74.7	76.5	63.0	65.7
Injection drug use (%)	61.6	67.2	47.3	47.9	63.7	70.1	38.9
HBV co-infected (%)	5.4	4.1	7..3	4.7	6.0	5.7	6.5
On cART (%)	81.2	82.4	79.1	85.4	87.0	74.2	93.5
On cART, VL<500 (%)	89.5	96.8	95.8	95.7	91.1	74.8	89.4
CD4 (median cells/mm^3)	50.8	588	588	520	532	412	451
Nadir CD4 (median cells/mm^3)	16.4	165	146	152	175	179	139
Age (median years)	4.5	50	51	50	40	36	46
Baseline (median mm/yy	10/13	10/13	10/13	07/14	10/13	10/13	10/13

Table 2

Baseline characteristics of 4608 HIV/HCV co-infected individuals

		S	W	N	CE	E	Argentina
N (%)	4608	1183 (25.7)	573 (12.4)	624 (13.5)	854 (18.5)	1266 (27.5)	108 (2.3)
HCV-RNA negative (%)	38.8	33.6	43.2	43.6	37.5	41.1	38.0
HCV-RNA >500,000 IU/ml (%)	44.6	50.5	39.3	43.6	40.2	45.6	35.9
HCV genotype 1 (%)	53.7	53.9	57.8	58.2	41.3	57.6	64.2
HCV genotype 2 (%)	2.8	1.7	2.7	6.8	1.1	2.5	3.9
HCV genotype 3 (%)	29.0	26.5	24.7	25.6	32.6	39.9	23.1
HCV genotype 4 (%)	14.4	17.9	14.5	8.7	25.0	0	3.9
≥F2 fibrosis (%)	15.4	17.6	13.0	15.6	13.9	16.1	6.7
Prior HCV treatment (%)	16.4	20.4	26.2	14.9	15.7	9.1	22.2
Prior DAA treatment (%)	0.8	1.4	1.2	1.0	0.7	0	0

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