



Long-acting injectable cabotegravir and rilpivirine outcomes in HIV-positive migrants in Spain: do they have worse outcomes?

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BACKGROUND

Cabotegravir and rilpivirine (CAB+RPV) is the first long-acting injectable (LAI) treatment approved in Europe. However, limited data is available on its effectiveness in migrants, a highly mobile and vulnerable group, who often lack complete information on their baseline HIV-1 genotype, subtype, or previous antiretroviral therapy (ART) history.

RESULTS

Of the 1,350 HIV-positive patients who switched to LAI CAB+RPV, 396 (29.3%) were migrants, mostly from Latin America (figure 1). Migrants' countries of origin are shown in figure 2.

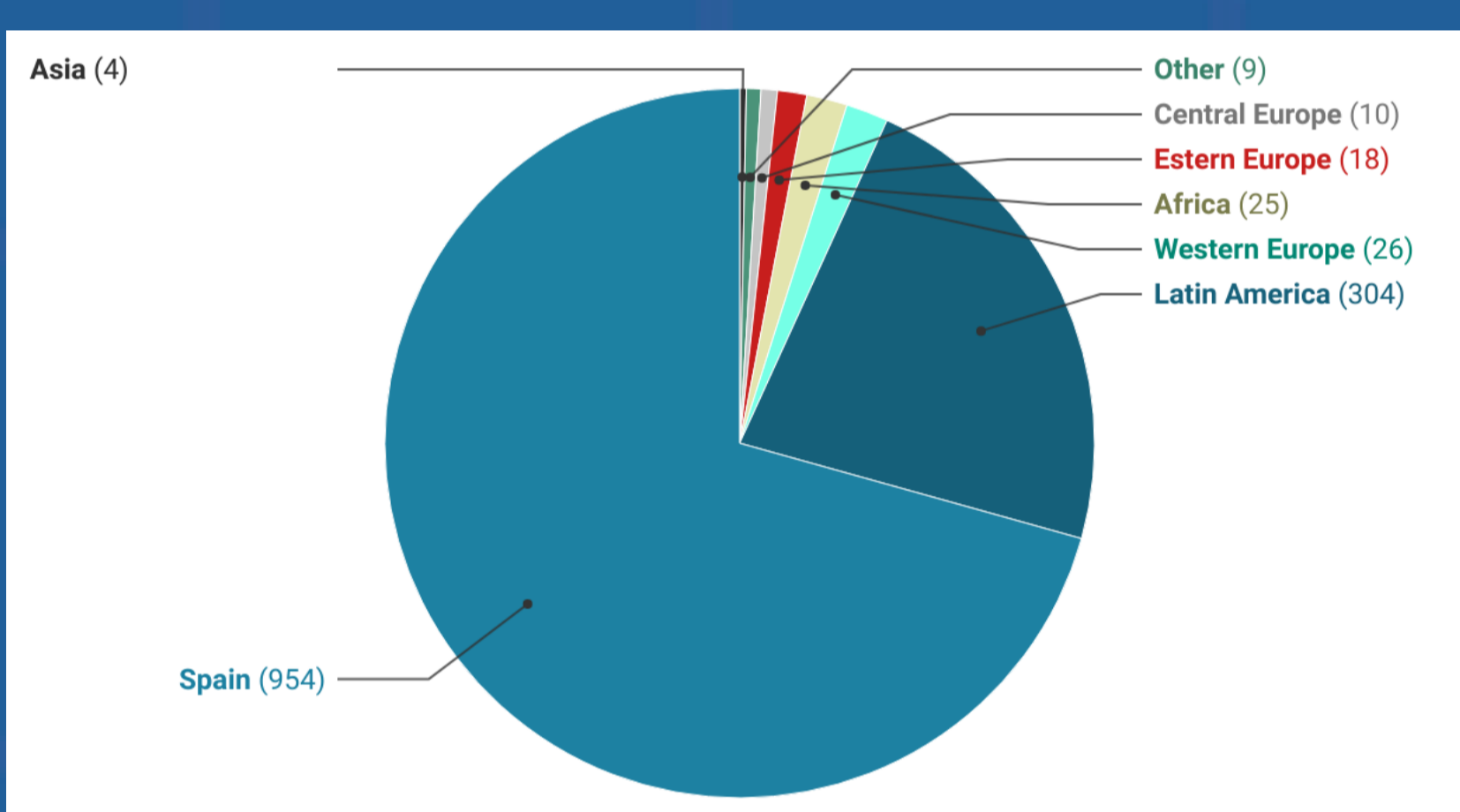


Figure 1. Area of origin of patients on CB+RPV in Relativity cohort

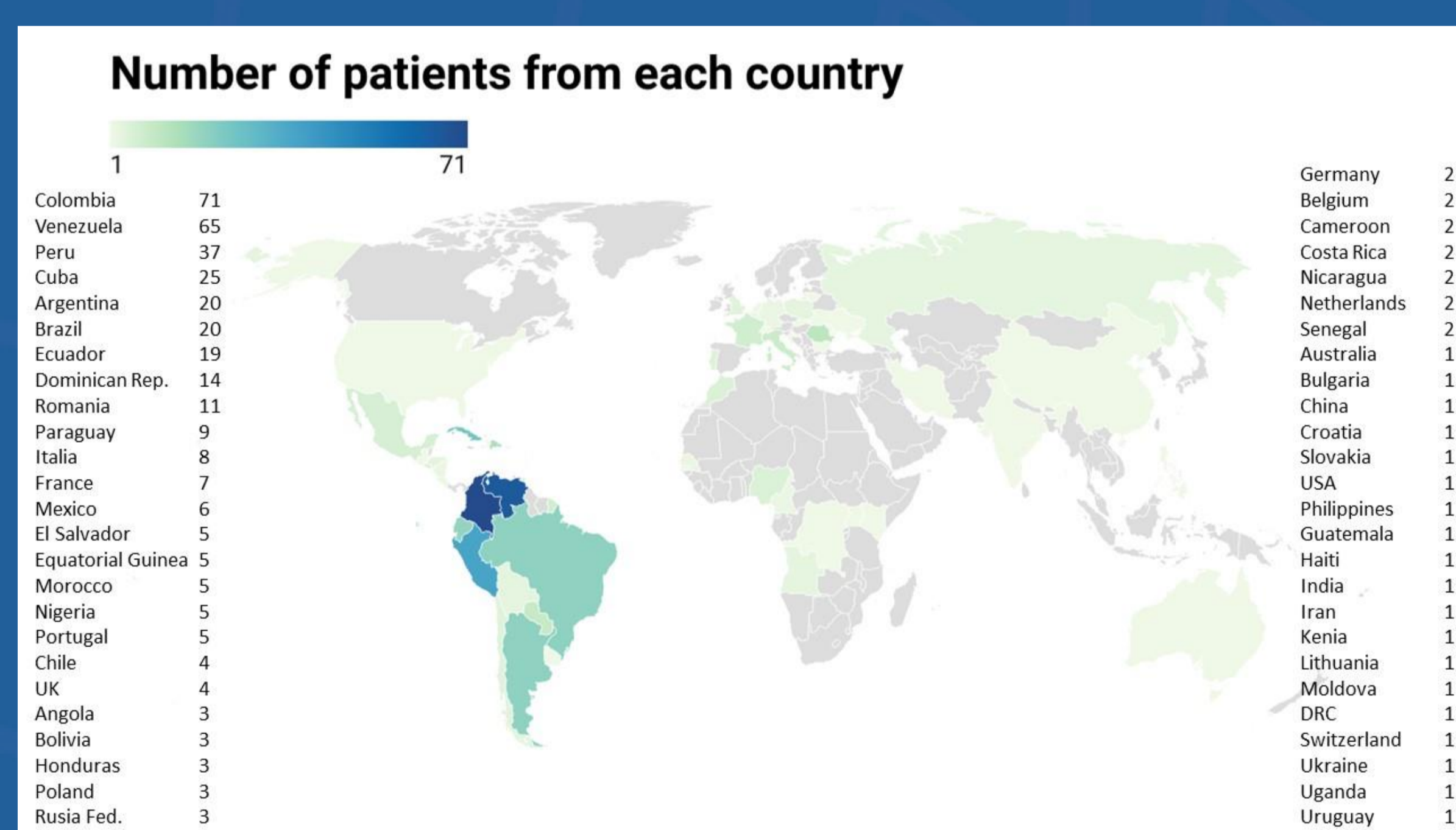


Figure 2. Country of origin of migrants on CB+RPV in Relativity cohort. CAB: cabotegravir; RPV: rilpivirine

Migrants tended to be younger, a higher percentage were women and modes of HIV acquisition varied. Migrants had a shorter median duration of undetectable viral load before switching to LAI CAB+RPV and showed higher rates of certain non-B subtypes (Table 1). After a median follow-up of 7.5 months, 7.1% of migrants discontinued LAI CAB+RPV, compared to 3.8% of Spanish-born patients (OR 2.10, 95%CI: 1.29-3.44) (figure 3). Side effects were a more frequent cause of discontinuation among migrants (OR: 2.65, 95%CI: 1.14-6.19), with local side effects being the most common. There were 6 cases of virological failure (3 in migrants and 3 in Spaniards, OR: 2.42, 95%CI: 0.49-12.04), and integrase mutations were detected in 2 migrants and 1 Spanish-born patient.

CONCLUSIONS

Nearly one-third of the patients switching to LAI CAB+RPV in this large Spanish cohort were migrants, primarily from Latin America. Migrant HIV-positive patients had double the risk of discontinuing LAI CAB+RPV compared to Spanish-born patients, with a higher likelihood of discontinuation due to side effects.

MATERIAL AND METHODS

A multicenter, non-controlled retrospective study was conducted, involving HIV-1 positive, virally suppressed patients who switched to CAB+RPV LAI from 37 hospitals in Spain. The baseline characteristics and outcomes of migrant patients were compared with those of Spanish-born patients. Quantitative variables were analyzed using the U-Mann-Whitney test, while categorical variables were compared using Chi-Square and Fisher's Exact tests.

	Migrants (n=396)	Spanish-born (n=954)	OR (95%CI)	p-value	
Age (years); median [IQR]	41.0 [33.0, 49.0]	47.0 [40.0, 57.0]	-	<0.001	
Sex: women	17.6%	13.6%	1.37 (0.98 - 1.90)	0.062	
Mode of HIV acquisition	GBMSM	71.0%	62.1%	1.49 (1.13 - 1.97)	0.003
	Heterosexual	21.4%	17.9%	1.25 (0.91 - 1.70)	0.154
	PID	1.4%	9.6%	0.13 (0.04 - 0.32)	<0.001
	Other/unknown	6.2%	10.4%	0.63 (0.40 - 1.01)	0.052
Months from diagnosis to first ART; median [IQR]	2.0 [0.0, 6.0]	3.0 [1.0, 20.0]	-	<0.001	
Years on ART when starting CAB+RPV	7.0 [4.0, 11.0]	10.0 [6.0, 16.0]	-	<0.001	
Months of undetectability prior to CAB+RPV	60.0 [22.0, 108.0]	96.0 [48.2, 140.0]	-	<0.001	
Prior genotype test	Non-available	52.4%	44.9%	1.35 (1.05 - 1.74)	0.017
	Wild type	64.6%	67.7%	0.87 (0.60 - 1.28)	0.514
HIV-1 Subtype	INSTI mutations	1.7%	0.4%	4.30 (0.49 - 51.93)	0.114
	NNRTI mutations	9.1%	6.2%	1.51 (0.75 - 2.94)	0.227
	NRTI mutations	8.0%	9.9%	0.80 (0.39 - 1.51)	0.548
B	47.4%	45.5%	1.08 (0.75 - 1.55)	0.660	
A	2.9%	3.2%	0.88 (0.25 - 2.58)	1.000	
F/CRF	6.3%	2.0%	3.26 (1.23 - 8.73)	0.010	
Prior virological failure	3.0%	5.5%	0.54 (0.25 - 1.06)	0.079	
Prior virological failure to NNRTI	0.6%	1.3%	0.45 (0.10 - 2.06)	0.306	
BMI (kg/m²); median [IQR]	25.1 [22.2, 27.7]	24.5 [22.1, 27.2]	-	0.298	

Table 1. Comparative analysis of basal characteristics between migrants and Spanish-born patients switching to long-acting injectable CAB+RPV in the Relativity cohort.

ART: antiretroviral treatment; BMI: body mass index; CAB: cabotegravir; GBMSM: gays, bisexuals and other men who have sex with men; INSTI: integrase strand transfer inhibitor; IQR: interquartile range; NNRTI: non-nucleoside reverse transcriptase inhibitor; NRTI: nucleoside reverse transcriptase inhibitor; OR: odds ratio; PID: people who inject drugs; RPV: rilpivirine; in bold: statistically significant

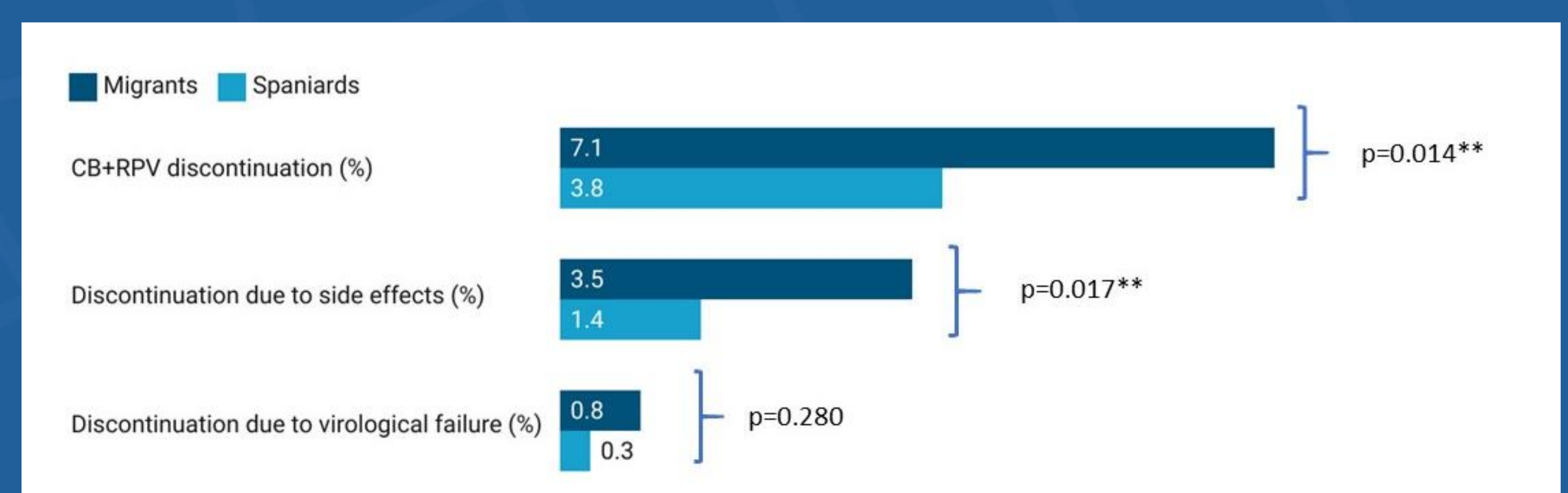


Figure 3. Main outcomes in migrants and Spanish-born patients switching to long-acting injectable CAB+RPV in the Relativity cohort.

CAB: cabotegravir; RPV: rilpivirine **Statistically significant

