

One-year outcomes of long-acting cabotegravir and rilpivirine in people living with HIV and a long exposure to antiretroviral therapy: data from the SCohoLART Study

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Introduction

Long-acting therapy in HIV infection represents an innovative strategy to address the aforementioned unmet need, thus positively affecting the quality of life. Currently, there are no data to our knowledge on people with HIV (PWH) with >10 years of antiretroviral therapy (ART) receiving cabotegravir (CAB) and rilpivirine (RPV) for ≥1 year

Aim of the study was to evaluate the 9- and 12-month cumulative probabilities of treatment discontinuation (TD) in PWH and a long exposure to ART switching to long-acting drugs

Methods

SCohoLART (NCT05663580) is a single-center, prospective, cohort study designed to collect both samples and clinical data of PLWH on virological suppression who switched to bimonthly CAB/RPV.

Participants were followed-up in accordance with national guidelines.

TD occurred at switch to another regimen for any reason including virological failure (VF); VF was defined as HIV-RNA ≥50 copies/mL at two consecutive measurements or a single HIV-RNA ≥1000 copies/mL. Participants' characteristics were reported as median (interquartile range, IQR) or frequency (%).

Cumulative probabilities of TD were estimated by Kaplan-Meier curve.

Results

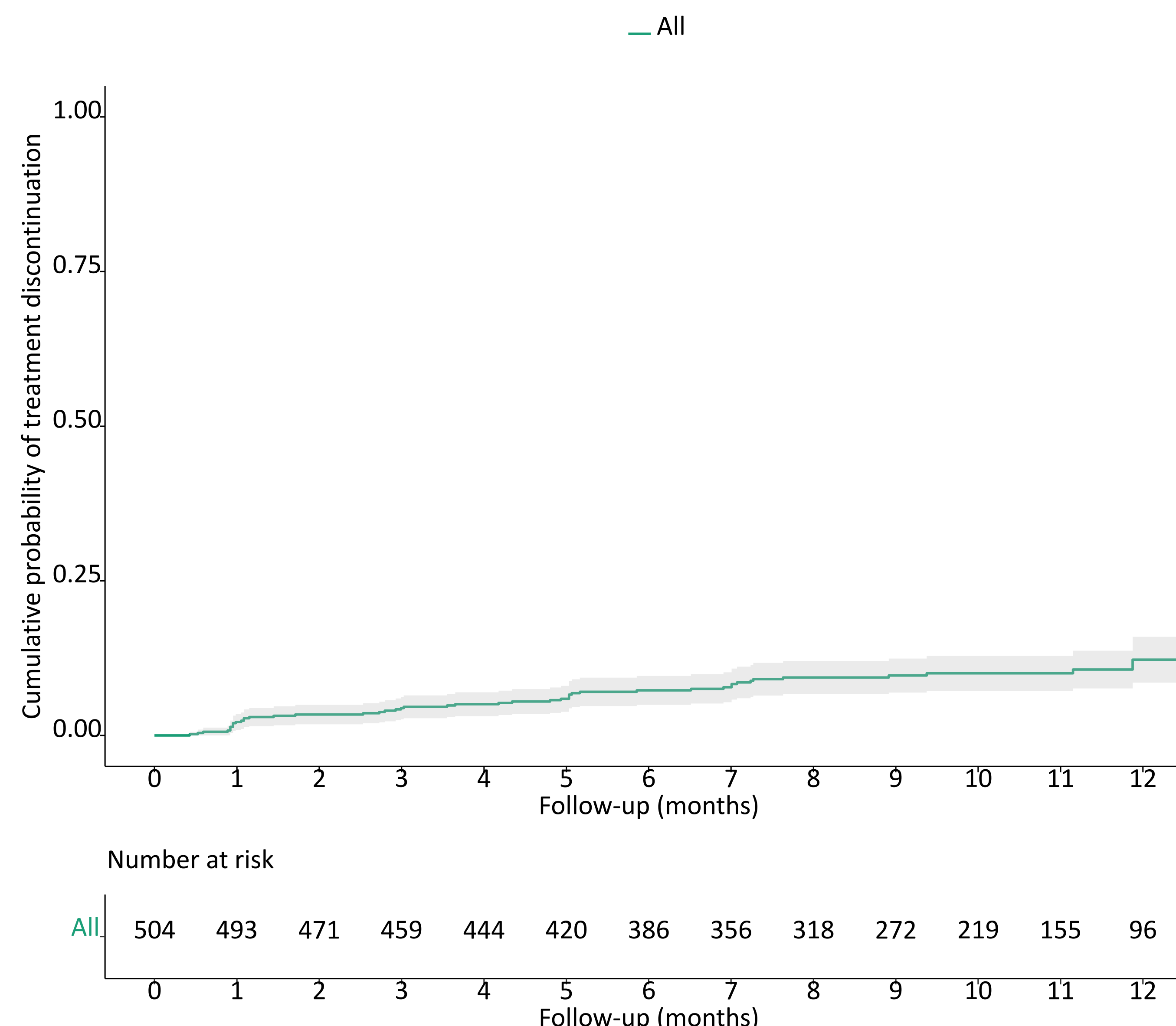
We evaluated 504 participants: 453 (89.9%) were male and median age was 49.0 (40.0-56.4). Median years from HIV diagnosis and of ART were 14.4 (9.0-21.2) and 11.5 (8.2-17.8), respectively; 175 (34.7%) were on dual therapy. During a median study follow-up of 9.4 (6.4-11.4) months, 48 PLWH experienced TDs (9.5%), including 4 (0.8%) for VF, whose characteristics are shown in Table 1.

The 9- and 12-month cumulative probabilities of TD were 10% (95%CI: 7%-12%) and 12% (95%CI: 9%-16%), respectively (Figure 1). Main cause of TD was injection site reaction (ISR; 10, 20.8%).

Table 1. Characteristics of participants experiencing virological failure

	Year of HIV diagnosis	Subtype	BMI (kg/m ²)	Pre CAB/RPV regimen	HIV RNA at VF	RPV at failure	STI at failure	Genotypic resistance testing at failure	Post CAB/RPV regimen	HIV RNA post CAB/RPV switch
1. Male, 50 years	2005	B	22.2	DTG/ABC/3TC	371 copies/mL 436 copies/mL	121.8 ng/mL	Gonococcal urethritis	NNRTI (RNA) E138A NNRTI (DNA) E138EA INSTI (RNA) E138EK, Q148R INSTI (DNA) Q148QR	DRV/c/F/TAF	<50 copies/mL after 4 weeks
2. Male, 41 years	2007	B	25.7	DTG/RPV	34300 copies/mL	170.5 ng/mL	Gonococcal urethritis	NNRTI (RNA) K101PQ, E138A INSTI (RNA) E138K, Q148R	DRV/c/F/TAF	<50 copies/mL after 32 weeks
3. Male, 56 years	2012	B	24.6	B/F/TAF	636 copies/mL 66500 copies/mL	50.5 ng/mL	Primary syphilis	NNRTI (RNA) K101E, E138A NNRTI (DNA) K101KE, E138EA INSTI (RNA/DNA) E157Q	DRV/c/F/TAF	<50 copies/mL after 20 weeks
4. Male, 57 years	2018	B	25.3	B/F/TAF	276 copies/mL 55 copies/mL	70.8 ng/mL	/	WT for NNRTIs and INSTIs	B/F/TAF	<50 copies/mL after 1 week

Figure 1. Cumulative probability of treatment discontinuation



Conclusions

- ✓ The 9- and 12-month cumulative probabilities of TD with CAB/RPV were low, with few VFs, in this cohort of ART-experienced PLWH.
- ✓ ISR is the leading cause of TD.

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