Twenty Months After Discontinuation of Cabotegravir/Rilpivirine: What Happens Next?

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BACKGROUND

- Data on cabotegravir and rilpivirine (CAB/RPV) use are increasing, but little is known about outcomes after treatment discontinuation (TD).
- Aims of the study were to characterize switch regimens, to estimate the probability of TD after CAB/RPV discontinuation and to assess changes in immunologic and metabolic parameters during CAB/RPV vs. subsequent oral antiretroviral therapy (ART).

METHODS

- People with HIV (PWH) receiving CAB/RPV were enrolled in the prospective SCohoLART study (NCT05663580).
- Participants who had been followed up for more than one year after discontinuing CAB/RPV and therefore enrolled before July 2024 were included.
- TD was defined as switch to another regimen for any reason.
- TD probabilities were determined using Kaplan-Meier curves
- Linear mixed models estimated monthly mean changes (slopes) with 95% confidence intervals (CI).
- Characteristics were reported as median (interquartile range) or frequency (%).

Table 1. Participants' characteristics

	N=66
Age	49.5 (42.0-55.8)
Male	60 (90.9%)
MSM	47 (71.2%)
Years of HIV infection	14.1 (11.1-19.4)
Years of ART	11.7 (8.3-17.2)
Previous AIDS	6 (9.1%)
HIVRNA <50 copies/mL	61 (92.4%)
HIVRNA ≥50 copies/mL	5 (7.6%)
Nadir CD4, cells/mcL	384 (237-537)
CD4, cells/mcL	783 (629-1008)
CD8, cells/mcL	847 (686-1166)
CD4/CD8	0.96 (0.65-1.21)
LDL cholesterol, mg/dL	116 (99-141)
Total cholesterol, mg/dL	186 (162-206)
Creatinine, mg/dL	1.1 (0.9-1.2)
BMI, kg/m²	25.8 (23.7-27.5)

All participants who discontinued CAB/RPV were subsequently switched to a single-tablet regimen, most commonly comprising a three-drug antiretroviral combination. The probability of TD during the months following CAB/RPV interruption remained appreciable.

RESULTS

- Overall, 66/509 PWH (13.0%) discontinued CAB/RPV after a median of 6 (2.5-10.3) months, mainly due to injection site reactions (27, 40.9%); 5 (7.6%) interrupted due to virological failure (VF).
- Of these 66 (Table 1), 100% switched to a single-tablet regimen (STR), including 40 (60.6%) to a 3-drug regimen and 26 (39.4%) to a 2-drug regimen; 53 (80.3%) received an integrase inhibitor-based ART.
- Overall, 55/66 (83.3%) resumed the oral ART prior to CAB/RPV, of which 33/66 (50%) with a three-drug ART.
- Over a median follow-up of 19.8 (14.6-26.0) months, 12 PWH (18.2%) experienced TD; the main cause was a reduction in the drug burden (4, 33.3%, Figure 1). No PWH switched due to VF.
- Median monthly CD4 changes were slightly higher during CAB/RPV compared to oral ART [5.3 (–7.6; 18.1) vs. 2.1 (–4.8; 8.9) cells/µL], though not significant (p=0.649); similar trends were observed for CD8 [6.0 (–10.2; 22.3) vs. 4.8 (–2.6; 12.1) cells/µL, p=0.887].
- Slopes per month in lipid parameters [LDL 0.04 (–1.83; 1.92) vs. –0.23 (–1.15; 0.69) mg/dL, p=0.802;
- total cholesterol 1.15 (–0.86; 3.17) vs. –0.09 (–1.29; 1.1) mg/dL, p=0.273] were minimal.

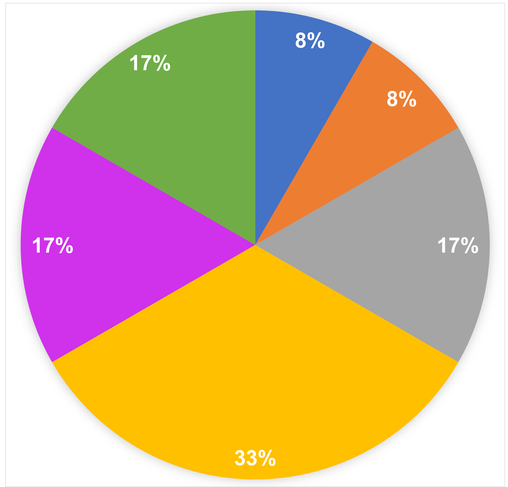


Figure 1. Causes of discontinuation of oral ART

- Abnormal fat redistribution
- Hypersensitivity reaction/allergy
- Toxicity/Side effects, predominantly from nervous system
- Simplified treatment available (lower drug burden)
- Study enrollment
- Patient's wish/decision

- After CAB/RPV discontinuation, TD probabilities were 9.1% (95%CI, 4.2%-19.1%) at month 6, 15.2% at month 12 (8.5%-26.3%), and 18.9% at month 18 (11.2%-31.1%) (Figure 2).

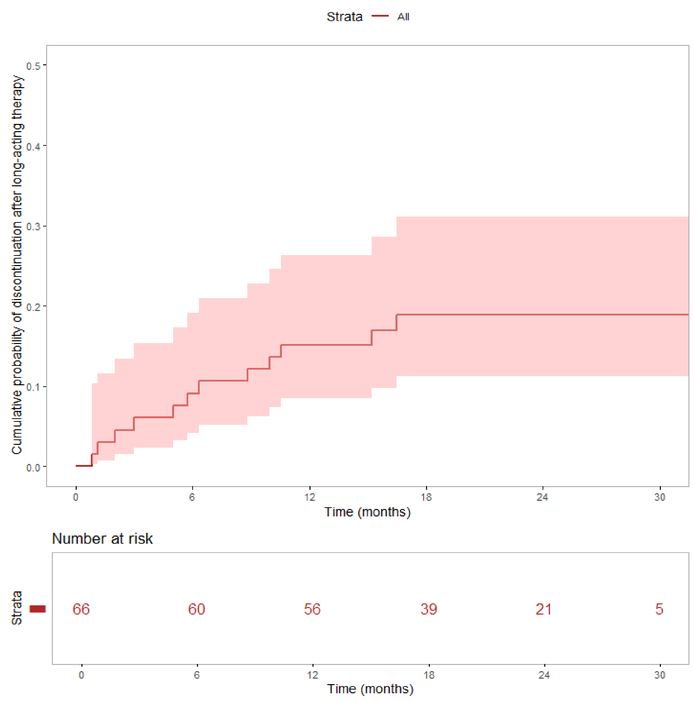


Figure 2. Treatment discontinuation probabilities

CONCLUSIONS

- All participants who discontinued CAB/RPV switched to an STR, mainly composed of 3 drugs; 83.3% resumed their previous therapy before CAB/RPV
- The probability of TD with the subsequent oral ART was not negligible, mainly due to drug simplification.
- After CAB/RPV discontinuation, no differences in immunologic and metabolic trajectories were observed.

CONTACT INFORMATION

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