

Real-World Utilization of Cabotegravir + Rilpivirine in the US: Data From Trio Health Cohort

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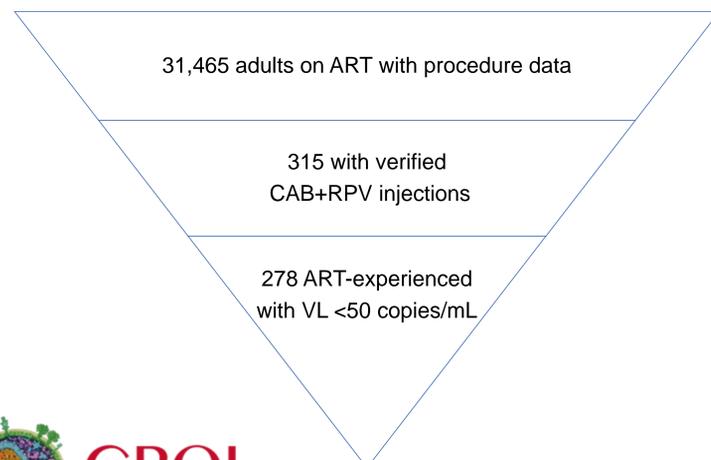
BACKGROUND

- CAB+RPV is the first complete long-acting (LA) antiretroviral regimen approved in the United States for the treatment of HIV for antiretroviral (ART) experienced people with undetectable viral load (VL <50 copies/mL). This study examines the utilization and effectiveness of CAB+RPV in real-world settings in the US.

METHODS

- All ART-experienced adults with undetectable viral load at initiation who received ≥1 documented CAB+RPV LA injection were identified from electronic health record data from a subset of sites in the Trio Health Cohort with CAB+RPV LA injection dates between Feb 2021 - Jul 2023.
- Discontinuation of CAB+RPV LA was defined as 2 consecutive missed injections or a regimen switch, while confirmed virologic failure (CVF) was defined as 2 consecutive VLs ≥200 copies/mL or 1 VL ≥200 copies/mL with discontinuation within 4 months of the last recorded injection.
- ARV resistance data based on HIV genotype test results was available for a subset of individuals and was analyzed using Stanford HIVdb algorithm among those with identified CVF.

Figure 1. Study population



Virally suppressed ART-experienced individuals who initiated long-acting CAB+RPV remained suppressed with <1% CVF. High levels of adherence and tolerance were observed on the long-acting regimen.

RESULTS

- 278 ART-experienced virologically suppressed individuals initiated CAB+RPV LA [Figure 1; Table 1].
- Median follow-up time after the first injection was 10 months (IQR 5-13) with median of 5 injections (IQR 3-7). 82% were on bimonthly dosing schedule.
- 246 (88%) of CAB+RPV initiators remained on the regimen at the end of follow-up [Figure 2]; among those who discontinued CAB+RPV, none had reported injection site reaction.
- 71% of initiators received all injections on-time (within the dosing window, ±7 days of scheduled injection date); 89% of all injections were administered on time. Among those with late injections, the median delay was 7 days (IQR 3, 21) past the dosing window.
- Among all initiators, 221 (80%) individuals had ≥1 recorded follow-up VL. Those with no follow-up VLs had a median of 1 injection (IQR 1-2).
- Among individuals with documented VL while on regimen, 213 (96%) had all follow-up VLs <200 copies/mL, with 196 (89%) undetectable at last recorded VL [Figure 3].
- 2 (0.9%) individuals discontinued CAB+RPV LA after one unsuppressed VL, meeting criteria for CVF.
- Baseline resistance data was available for 1 of the individuals with CVF, who had high-level resistance to both NNRTI and NRTI prior to CAB+RPV initiation; no resistance data was available at CVF, and no suppression has been observed on D/c/F/TAF.
- The other individual with CVF re-suppressed to VL <200 copies/mL in 3 months on B/F/TAF.

Table 1. Study population characteristics

Characteristic		PWH with CAB+RPV Injections N = 278 n (%) unless specified
Age	Age, median (IQR)	44 (35, 55)
Gender	Female	47 (17)
	Male	221 (79)
	Unknown	10 (4)
Race/Ethnicity	White	137 (49)
	Black or African American	99 (36)
	Hispanic or Latino	20 (7)
	Another Race	6 (2)
	Unknown Race	16 (6)
Payer Type	Commercial	176 (63)
	Medicare/Medicaid	11 (4)
	Other/Self Pay	88 (32)
	Unknown Payer	3 (1)
US Region of Practice	South	204 (73)
	Northeast	64 (23)
	West	10 (4)
	Central	0 (0)
BMI	Med (IQR)	28 (25, 32)
	Obese (BMI ≥ 30)	96 (35)
CD4	Absolute CD4 (cells/μL), Med (IQR)	N=271; 738 (534, 939)
	<60 mL/min/1.73m ²	16/254 (6)
eGFR	60-89 mL/min/1.73m ²	114/254 (45)
	≥90 mL/min/1.73m ²	124/254 (49)

Figure 2. PWH on CAB+RPV regimen at the end of follow up, n = 278

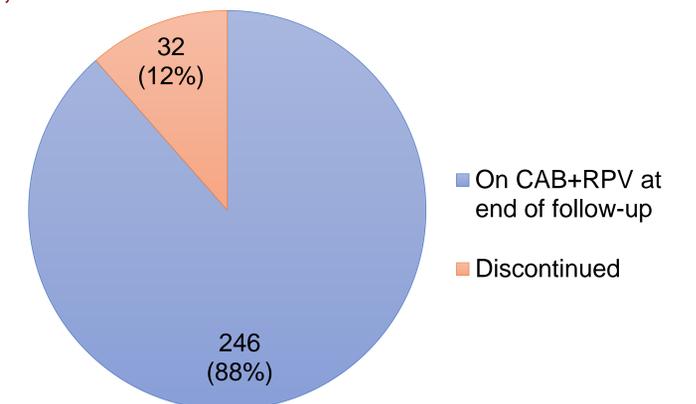
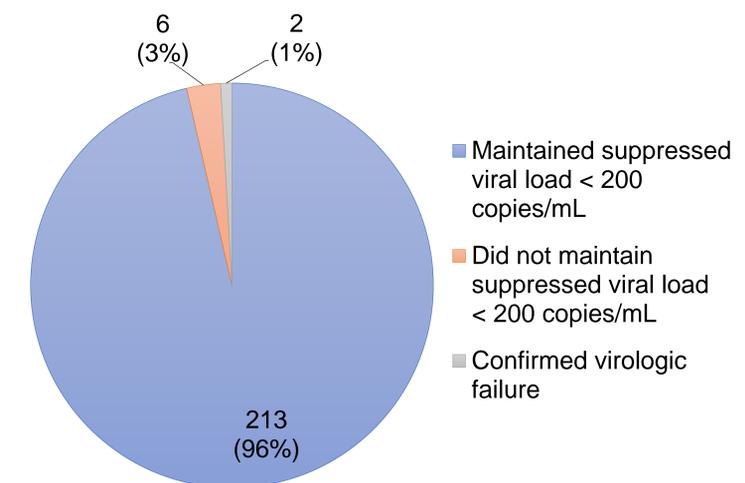


Figure 3. PWH on CAB+RPV LA at last VL, n = 221



CONCLUSIONS

- Among ART-experienced adults initiating CAB+RPV with undetectable viral load, the vast majority continued the regimen and maintained virologic suppression throughout the follow-up period.
- CVF was rare, suggesting high effectiveness of CAB+RPV in real-world settings.

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FOR MORE INFORMATION:

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