Real-World Utilization and Effectiveness of Long-Acting Cabotegravir + Rilpivirine in Virologically Suppressed Treatment Experienced Individuals in Europe: Data from COMBINE-2 Cohort Study

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General

Category: C8: Cascades of HIV care and treatment

Country of research: Belgium, France, Germany, Netherlands, the, Spain, Switzerland, United Kingdom

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Abstract Text (max 350 words)

Background: Cabotegravir (CAB) + rilpivirine (RPV) is the first complete long-acting (LA) regimen for treatment experienced virologically suppressed (HIV-1 RNA <50 copies /mL) people with HIV (PWH) without present or past evidence of viral resistance to, and no prior virological failure with NNRTI and INI class agents. This study assessed the utilization and virologic effectiveness among individuals initiating CAB+RPV LA regimen in real-world setting in Europe.

Methods: Adult PWH who were treatment experienced, virologically suppressed and received CAB+RPV between December 2020 and September 2023 were enrolled at NEAT ID Network sites across seven European countries. Viral loads (VLs) were assessed from first injection until CAB+RPV discontinuation or at analysis.

Results:

Table 1. Virologic outcomes among individuals initiating CAB+RPV LA regimen

		Treatment experienced Undetectable VL (<50 copies/mL) at initiation (N=477)
Duration of follow-up	Median months (IQR)	3.0 (2.8, 7.1)
On CAB+RPV LA at end of follow-up	n (%)	458 (96)
≥1 VL after first injection	n (%)	378 (79)
	Last VL <50 copies/mL, n (%)	369/378 (98)
Confirmed virologic failure*	n (%)	3/378 (0.8)

*Two consecutive VLs ≥200 copies/mL or one VL ≥200 copies/mL followed by discontinuation

A total of 477 individuals initiating CAB+RPV are included in the analysis. All were treatment experienced, had VL <50 copies/mL at initiation, had no previous virologic failure and five individuals had history of either NNRTI or INSTI mutations but were sensitive to these classes. The median age was 44 years (IQR: 37-53), 89% were males and median BMI at initiation was 24.7 kg/m^2 (IQR: 22.7-27.4). Adherence to CAB+RPV LA regimen was high, 2% individuals having delayed doses with a median delay of 7 days (IQR: 7-8) and one individual with missed doses. 96% of individuals remained on CAB+RPV LA regimen with a median follow-up of 3.0 months (IQR: 2.8, 7.1). Of 378 individuals with follow-up VLs, 98% had last VL measured <50 copies/mL. Three individuals had confirmed virologic failure (CVF) after initiation of CAB+RPV LA regimen. One individual had low-level resistance to rilpivirine and no resistance to the INSTI class at failure.

Conclusions: The real-world data of PWH who received CAB+RPV LA in Europe, suggest that the regimen is effective among individuals virologically suppressed at initiation. High levels of virologic control were observed with low CVF (<1%), consistent with clinical trial data.

Additional questions

Ethical research declaration: Yes

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