REAL WORLD 96-WEEK SUPPRESSION RATES WITH LONG-ACTING INJECTABLE HIV THERAPY AMONG PEOPLE WHO USE DRUGS WITH DIFFICULTY ADHERING TO ORAL THERAPY

Authors

Ostrer L[1], Hastie E[1], Bamford L[1], Karim A[1], Martin NK[1], Hill L[1], Martin T[1,2]

[1]University of California San Diego, Department of Medicine, Division of Infectious Disease and Global Public Health [2]Veterans Affairs San Diego, Department of Medicine, Division of Infectious Disease and Global Public Health

Background

Long-acting injectable cabotegravir/rilpivirine (LAI-CAB/RPV) may improve outcomes for people with HIV (PWH) with difficulty adhering to oral antiretroviral therapy (ART), including those with substance use disorders. However, this population has been largely excluded from clinical trials, and real-world outcomes beyond one year remain limited.

Methods

This was an observational cohort study of PWH with documented adherence challenges[1] who initiated LAI-CAB/RPV between November 2021 and September 2023 at the University of California, San Diego Owen Clinic. Primary outcomes were virologic failure (VF)[2] or discontinuation of LAI-CAB/RPV through 96 weeks. Outcomes were stratified by history of injection drug use (IDU) and active substance use[3]. Univariate and multivariate (Firth) logistic regression evaluated factors associated with discontinuation, including active substance use, baseline CD4 count, and psychiatric comorbidity.

Results

Among 62 participants, 41% reported active substance use and 41% had a history of IDU. At 96 weeks, 48 participants (77%) remained on LAI-CAB/RPV with viral suppression, while 14 (23%) discontinued LAI-CAB/RPV. Among discontinuations, 3 experienced VF (at 28, 40 and 42 weeks) and 3 were lost to follow up (LTFU). In univariate analysis, methamphetamine use at initiation was associated with VF or LTFU (OR=12.5, p=0.026). Multivariable analysis did not identify independent predictors of treatment failure, likely due to limited power. Among 36 participants with active substance use or prior IDU, 26% discontinued LAI-CAB/RPV, 17% due to LTFU or VF, while 74% remained virally suppressed on LAI-CAB/RPV at 96 weeks.

Conclusion

After 96 weeks, 75% of participants with active substance use or prior IDU remained suppressed on LAI-CAB/RPV, comparable to those without reported substance use. Differences in outcomes among those with active substance use or prior IDU were not statistically significant compared with the cohort

[1] Adherence challenges were defined as: HIV viral load (VL) ≥ 200 copies/mL in the prior 12 months plus either persistent viremia despite oral ART or lost to follow-up

[2] Virologic failure defined as: two consecutive VL ≥ 200 copies/mL, one VL ≥ 1000 copies/mL or one VL ≥ 200 copies/mL with evidence of resistance mutation to CAB or RPV ≥ 30 days after initiating LAI-CAB/RPV

[3] Active substance use defined as: positive urine toxicology or provider documentation in prior year

overall. These findings support the long-term effectiveness of LAI-ART for PWH with adherence challenges, including those with active or prior substance use.

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