

TR-DOLA: Real-world Data on the Use of Dolutegravir (DTG) + Lamivudine (3TC) in Treatment-Experienced People Living With HIV in Türkiye

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Background

In Türkiye, the combination of dolutegravir (DTG) and lamivudine (3TC) was only available as separate tablets during the study period, unlike in many other countries where they are combined into a single pill. This study aimed to evaluate how effective this 2-drug regimen is in everyday clinical settings. Two-drug regimens like DTG + 3TC might offer benefits such as fewer side effects and interactions compared to traditional 3-drug treatments. This combination is recommended both for people who are starting antiretroviral therapy for the first time and for people switching from another regimen.

What treatment was studied here?

The study focused on the combination of dolutegravir (DTG) and lamivudine (3TC) as a multi-tablet regimen for treating HIV. DTG works by preventing the virus from integrating into human DNA, while 3TC blocks an enzyme HIV needs to multiply. Although typically

available as a single pill, this combination was evaluated in Türkiye as separate tablets due to local availability during the study period.

What was the purpose of this study?

The study aimed to assess how effective and safe the DTG + 3TC multi-tablet regimen is in real-world clinical settings in Türkiye. This is crucial to understand how well this regimen works outside controlled clinical trials in settings where it is only available as separate tablets. Real-world studies provide insights into how treatments perform in everyday practice, which can differ from controlled environments.

Who took part in the study and how was the treatment studied?

The study included 254 adults living with HIV who had previously achieved undetectable virus levels with other HIV treatments. Participants were aged 18 and older, with an average age of 50.2 years. Conducted across 15 hospitals in Türkiye from January 2024 to February 2025, the study involved data collection over at least 48 weeks. Participants had been on DTG + 3TC for at least 24 weeks till Day 1 (study involvement). This diverse group helps ensure the findings are relevant to many individuals living with HIV.

What are the research findings?

The study showed that the DTG + 3TC regimen effectively maintained undetectable virus levels in 94% of participants, with HIV-1 RNA levels staying below 50 copies/mL at both the start and prospective Week 24. This indicates the regimen is effective in controlling the virus. There were also improvements in immune health, with CD4+ cell counts and CD4+/CD8+ ratios increasing significantly. The average CD4+ cell count rose from 693 cells/mm³ at the start to 916 cells/mm³ at prospective Week 24. However, kidney function, measured by creatinine clearance, slightly decreased due to inhibition of OCT2. No significant changes were seen in liver function, cholesterol levels, BMI, or bone health.

What does this mean for people with HIV?

For people living with HIV, these findings suggest that the DTG + 3TC regimen is effective in keeping virus levels suppressed and boosting immune health. This regimen may offer a simpler treatment option with fewer pills, potentially reducing long-term drug exposure and side effects compared to more complex treatments. The study also emphasizes the need to monitor kidney health, as a slight decrease in kidney function was observed.

Conclusions

The study supports using DTG + 3TC as an effective treatment for adults with HIV in Türkiye who have achieved undetectable virus levels. The regimen showed high effectiveness and improved immune health, similar to results from other regions. It offers a simpler treatment option with fewer drugs. Healthcare providers should be aware of potential changes in kidney health and consider regular monitoring. Overall, this study provides valuable real-world data to help guide treatment decisions for people living with HIV.

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