

# Outcomes of Children Living with HIV Transitioned to Dolutegravir-based Antiretroviral Therapy Regimens in Midlands and Manicaland Provinces of Zimbabwe, 2022

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## Introduction

Dolutegravir (DTG) is an anti-retroviral medicine proven to significantly reduce viral load (VL) among people living with HIV (PLHIV). Zimbabwe is using the child-friendly dispersible pediatric DTG (pDTG) 10mg tablet in addition to the 50mg tablet. ZHI is supporting roll out and transition to DTG-based regimens in children using a phased approach starting with tertiary level facilities and scale up to lower-level facilities started in March 2022. We assessed DTG transition progress and outcomes of pediatric clients before and after DTG transition.

## Methods

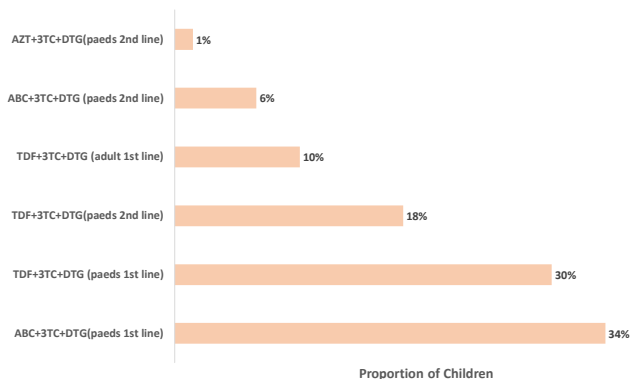
We conducted an analytic cross-sectional study focusing on client outcomes before and after DTG transition across 34 purposively selected high-volume sites. The primary outcome was viral load suppression, and all children on ART in these facilities were included. Client folders were reviewed, and secondary data were abstracted and captured into a Kobo electronic data collection tool. Data were analyzed using Stata 15 generating proportions and measures of association.



## Results

A total of 1,003 children were included in the study and median age was 11 years (IQR 7-13) and of these, 811 (81%) were on a non-DTG based regimen when they started ART. Out of the 811, 72% were switched to a DTG-based regimen, and a majority (34%) were on pediatric first line (Fig 1).

Fig 1: Distribution of children switched by regimen



Data to measure the effect of DTG transition was available for 276 children who had VL before and after transitioning. A total of 220 (80%) had a suppressed VL before transition and 264 (96%) had a suppressed VL after transitioning ( $p < 0.05$ ). Children who remained on a non-DTG containing regimen were 8 times more likely to have unsuppressed VL compared to those who switched to DTG (RR 7.86, 95% CI 2.4-25.2).

## Conclusion

A significant proportion of children were transitioned to a DTG-containing regimen and had better VL suppression compared to those on a non-DTG regimen. We recommend programs to develop guidance to expedite transition of children to DTG-based regimens.

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