Viremia and drug resistance over 2 years after routine switching to dolutegravir-based first-line ART

Switching only PWH with evidence of virologic suppression to DTG-based ART may reduce the risk of viremia and the potential for drug resistance

• Most participants were female (99.1% Malawi, 83.0% Zambia), median time on ART was about 6 years
• Most participants switched to TDF/3TC/DTG [TLD] (99.6% Malawi, 85.8% Zambia); the remaining 14.2% in Zambia switched to TAF/FTC/DTG
• 5.4% of participants viremic at switch in Malawi (5.4%), compared to 3.0% in Zambia (P=0.001).
• At 2 years, corresponding percentages were 4.7% and 1.8% (P<0.0001).
• Viremia at switch was associated with viremia at 1 year and 2 years (Figure)
• Viremia at 1 year and 2 years were less likely in Zambia than in Malawi (Figure)

CONCLUSIONS
• Most people switching to DTG-based ART maintained virological suppression at two years post-switch
• INSTI drug resistance was rare at two years post-switch suggesting most cases of viremia may have been linked to challenges with adherence
• The policy in Zambia of requiring recent VL<1000 copies/mL before switch may have reduced the incidence of viremia during follow-up and may prevent drug resistance
• Overall, the findings support the widespread transition to DTG-based ART. Continued monitoring of virological outcomes and drug resistance in this population is important to ensure the long-term effectiveness of this strategy

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