# Factors Associated with Sustained Viral Suppression after Viremia in People Living With HIV

G-02

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## BACKGROUND

- Scale-up of ART has improved HIV outcomes, estimates pointing to 94% of the 40.8 million people on treatment virally suppressed (<1000 copies).
- Kenya has made commendable progress toward the UNAIDS 95–95–95 targets, but viral suppression (<200 copies) is suboptimal.
- Limited evidence exists on long-term outcomes among clients after high viral load/viremia.
- This study examined predictors of sustained viral suppression (two consecutive results) among People Living with HIV (PLHIV) following a viremia ≥ 200 copies/ml while on ART.

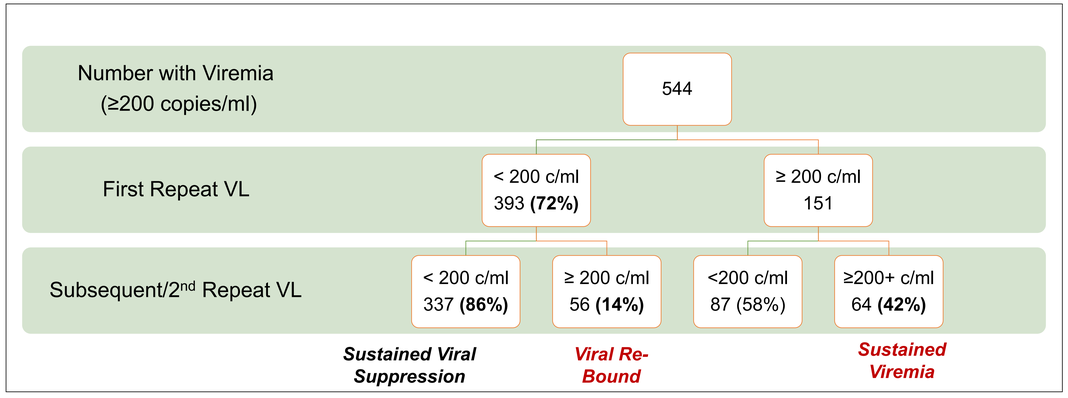
## METHODS

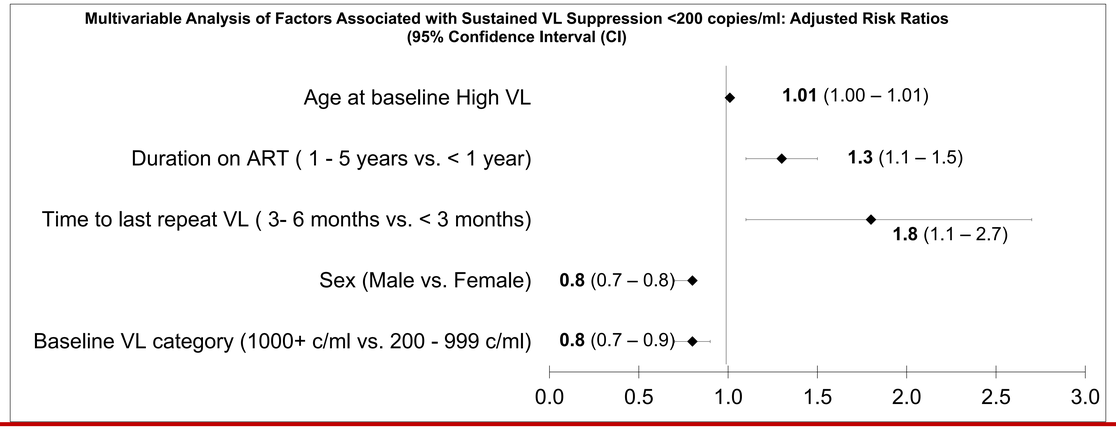
- We conducted a retrospective analysis of PLHIV on ART with viral load (VL) ≥200 copies/ml between October 2022 and September 2024, and with ≥ 2 subsequent VL results
- Data was extracted from the Kenya electronic medical records in CIHEB Kenya–supported health facilities in Kibwezi East and West, Makueni County in Eastern region of Kenya
- Measures of central tendency and proportions were used to describe characteristics of the PLHIV, while adjusted modified poisson regression with robust estimators used to assess associations with sustained viral suppression (SVS) at 5% levels of significance..

**Increasing age, longer duration on ART, female gender and time to repeat VL were positively associated with sustained HIV Viral suppression.**

## RESULTS

- Data for 544 PLHIV with VL >200 copies/ml was abstracted; Median (IQR) age of 39 (22–50) years.
- Majority 359 (66%) were female, 510 (94%) were on a DTG-based regimen at the time of VL ≥ 200 copies/ml), and 324 (60%) had been on ART for over 5 years.
- 337 (72%) had VL <200 copies/ml on 1st repeat VL testing, of whom 86% maintained the suppression in subsequent testing. 87 further suppressed on second repeat VL
- Median time to 1st repeat VL result was 5.8 months (IQR: 4.7 – 7.9)
- Increasing age, longer duration of ART, female gender and viral load <1000 copies at viremia diagnosis were positively associated with sustained viral suppression




## CONCLUSIONS

- Age, duration on ART, gender, time to repeat viral load and viral load quantities were significantly associated with sustained viral suppression.
- Understanding these determinants is critical in designing timely and tailored interventions to address the needs to various individuals.
- Profiling high risk individuals and providing enhanced support may be necessary to bridge the gap in achieving sustained viral suppression among patients with viremia.

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CDC U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION
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