COMPARISON OF VIRAL REPLICATION FOR THE 2-DRUG REGIMEN (2DR) OF DOLUTEGRAVIR/LAMIVUDINE (DTG/3TC) VERSUS A 3/4-DRUG TENOFOVIR ALAFENAMIDE–BASED REGIMEN (TBR) IN THE TANGO STUDY THROUGH WEEK 96

Authors:
Wang R[1], Wright J[2], George N[2], Ait-Khaled M[3], Lutz T[4], Osiyemi O[5], Gorgolas M[6], Leone P[1], Wynne B[1], van Wyk J[3], Underwood M[1], Maccarrone A[7]

[1] ViiV Healthcare, Research Triangle Park, NC, USA, [2] GlaxoSmithKline, Stockley Park, UK, [3] ViiV Healthcare, Brentford, UK, [4] Infektio Research, Frankfurt, Germany, [5] Triple O Research Institute PA, West Palm Beach, FL, USA, [6] Jiménez Díaz Foundation University Hospital, Madrid, Spain, [7] ViiV Healthcare, Abbotsford, Australia
Presenting Author Address: Level 3, 436 Johnston Street, Abbotsford, Victoria 3067
Presenting Author Telephone: +61 418 518 813
Presenting Author Email: ann.l.macarrone@viivhealthcare.com

Background:
TANGO demonstrated non-inferior virologic efficacy (HIV-1 RNA ≥50 c/mL by Snapshot) of switching to dolutegravir/lamivudine (DTG/3TC) vs continuing a tenofovir alafenamide (TAF)-based regimen (TBR) in HIV-1-infected, virologically suppressed adults at 96 weeks. Abbott RealTime HIV-1 assay measures viral load (VL) from 40 to 10,000,000 c/mL, and provides qualitative target detected (TD) or target not detected (TND) outcomes for VL <40 c/mL. Clinical significance of low-level VL <50 c/mL remains unclear. We assessed proportion of participants with TD/TND and elevated VL through Week 96 (Wk96).

Methods:
Proportions of participants with VL <40 c/mL and TND were analysed by visit (Snapshot) through Wk96. Participants' TD/TND status over time, overall and by Baseline VL classifications, was assessed. Frequency of elevated VL categories including "blips" was determined.

Results:
At Wk96, similar proportions of participants had TND with DTG/3TC and TBR (73% [271/369] vs 69% [255/372], respectively; adjusted difference, 4.9%; 95% CI, −1.7, 11.4; Snapshot). Across Baseline VL categories, proportions with TND at all visits through Wk96 were higher at 37% (137/369) with DTG/3TC vs 31% (114/372) with TBR. Occurrence of elevated VL was low and similar across arms through Wk96 (6% [23/369] with DTG/3TC; 10% [36/372] with TBR). Most frequently observed VL rebounds across arms were "blips," (5% [18/369] and 8% [28/372] with DTG/3TC and TBR, respectively). Zero and 3 confirmed virologic withdrawals were observed with DTG/3TC and TBR, respectively.

Conclusion:
Similar proportions of participants had TND at all visits through Wk96 in both treatment arms. Regardless of Baseline VL, incidence of intermittent viremia was low and similar between arms. These "deep dive" virology findings further support the potency and durability of DTG/3TC vs TBR in maintaining viral suppression.

Disclosure of Interest Statement:
R Wang, M Ait-Khaled, P Leone, B Wynne, J van Wyk, M Underwood, and A Maccarrone are employees of ViiV Healthcare and may own stock in GlaxoSmithKline. J Wright and N George are employees of and may own stock in GlaxoSmithKline. T Lutz has received grants from Gilead, Merck Sharp and Dohme, GlaxoSmithKline, Heidelberg ImmunoTherapeutix, Deutsche Leberhilfe e.V., and dagnä e.V O Osiyemi has nothing to disclose. M Gorgolas has received clinical trial fees from ViiV Healthcare and personal fees from ViiV Healthcare, Gilead, and Janssen. This study was funded by ViiV Healthcare.