

Weight Changes in Patients Receiving **Dolutegravir-Based Regimens**

Weight Gain in DHHS Guidelines

ART-associated Weight Gain¹

- Significant weight gain may occur with all ART regimens, but it appears to be more pronounced with DTG, BIC, or TAF
- The mechanism of weight gain is unclear and under investigation

Risk Factors for Weight Gain in PLHIV

















 $\geq 100,000 \text{ c/mL}^{7,14,20}$

CD4+ cell count < 100-200 cells/mm³ or CDC stage C^{7,8,13-17,21}

ARTs^{7-10,12,24-41}

Adjusted Mean Change in Weight

ART or after ART switch

NRTI (ABC vs. AZT)

NRTI (TDF vs. AZT)

NRTI (TDF vs. ABC)

NRTI (TAF vs. TDF)

Risk factor for significant (≥10%) weight gain up to Week 48

EFV -> RPV vs Stay on EFV

EFV -> EVG vs Stay on EFV

NVP -> EVG vs Stay on NVP

DTG -> BIC vs Stay on DTG

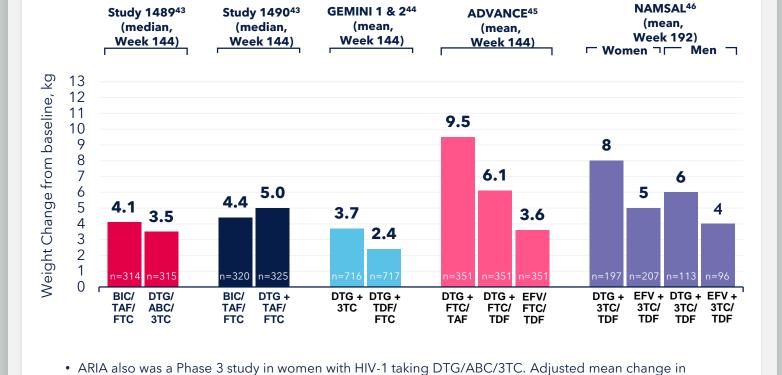
TAF.²²

Mean Weight Gain in PLHIV

treatment experienced clinical trials. 42-49

Weight Change in Phase 3 Treatment Naïve Adult Clinical Trials

A mean increase in weight ranging from 0.8 to 9.5 kgs has been observed in participants receiving a DTG-based regimen across 1 phase 2b and 7 Phase 3 treatment naïve clinical trials and 2 Phase 3



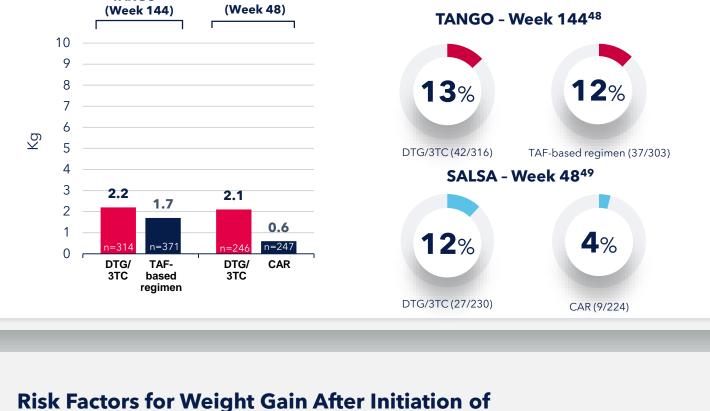
Phase 3 Treatment Experienced Adult Clinical Trial Results

weight^a from baseline to Week 48 for the DTG (n = 248) vs ATV/r (n = 247) group was 2.61 vs 1.41 kg.⁴⁷

from Baselineb TANGO⁴⁸ SALSA⁴⁹

Proportion of Participants with ≥ 10%

Weight Gain



Pooled data from 8 randomized clinical trials was assessed in over 5,000 treatment naïve patients to identify risk factors for weight gain after the initiation of ART. INSTIs were associated with more weight

Increased risk

p value

0.82

0.44

0.31

0.003

p-value

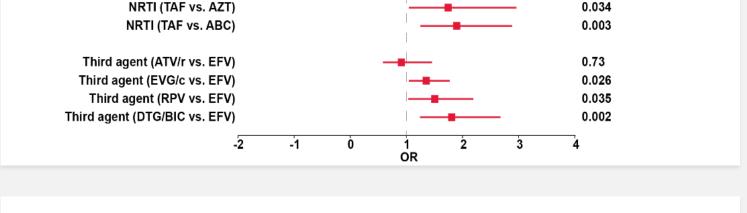
< 0.0001

0.0001

0.4548 0.2641

Decreased risk

gain than PIs or NNRTIs, with DTG and BIC being associated with more weight gain than EVG/c.32 ART Associated with Significant Weight Gain (≥ 10%)



Pooled data from 12 trials was assessed in over 7,000 PLHIV on ART and virologically suppressed for a minimum of 12 months. In a logistic regression model also including ART switch categories, there was increased risk for ≥ 10% weight gain with switch from EFV to RPV or to EVG/c and switch from TDF to

OR (95% CI)

PI -> BIC vs Stay on PI 0.3871 0.8879 EVG -> BIC vs Stay on EVG PI -> EVG vs Stay on PI 0.7563 TDF -> TAF vs Stay on FTC/TDF < 0.0001

ABC -> TAF vs Stay on ABC/3TC 0.7383 7 Important safety information is found in the Prescribing Information. For more information Weight Gain Video

VIIV US Medical Portal

Weight Gain Overview Letter

View Video

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844-8872. Please consult the Prescribing Information. This response was developed according to the principles of evidence-based medicine and, therefore, references may not be all-inclusive. FOOTNOTES: a The mixed-model repeated measure included fixed effects terms for treatment, visit, screening plasma HIV-1 RNA (continuous), screening CD4+ cell count (continuous), race (African American/African heritage, other), and interaction of visit by treatment

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and the treatment and the corresponding baseline weight value as a fixed effect covariant. b The mixed-model repeated measures adjusting for treatment, visit, baseline third agent glass, CD4+ cell count (continuous), age (continuous), sex, race, prior TAF duration (continuous), region, BMI subgroup, treatment-by-visit interaction, treatment-by-BMI subgroup interaction, BMI subgroup-by-visit interaction, and treatment-by-BMI subgroup-by-visit interaction, with visit as the repeated factor. **ABBREVIATIONS:** 3TC = lamivudine; ABC = abacavir; ART = antiretroviral; BIC = bictegravir; CAR = combination antiretroviral therapy; DHHS = Department of Health and Human Services; DTG = dolutegravir; EFV = efavirenz; FTC = emtricitabine; OR = odds ratio; PLHIV =

Some information contained in this response may not be included in the approved Prescribing Information.

inconsistent with its approved labeling. In order for ViiV Healthcare to monitor the safety of our products, we encourage healthcare professionals to report adverse events or suspected overdoses to the company at 877-

This response is not intended to offer recommendations for administering this product in a manner

people living with HIV; TAF = tenofovir alafenamide. REFERENCES: 1. Guidelines for Use of Antiretrovirals in Adults and Adolescents with HIV. Accessed Feb 2022; 2. Koethe JR, et al. AIDS Res Hum Retroviruses 2016;32:50-8; 3. Lake JE, et al. CROI 2019. Poster 669; 4. Palella FJ, et al. CROI 2019. Poster 674; 5. Bedimo R, et

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