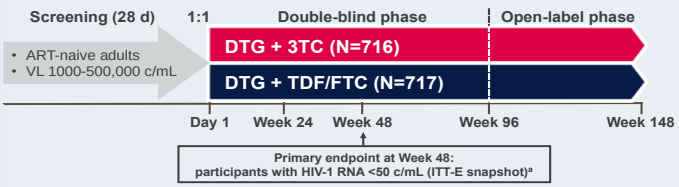
Results From the GEMINI 1 & 2 Phase 3 Clinical Trials in Treatment-Naïve Adult Patients with HIV-1 Receiving the Components of *Dovato*

Study Design[1,2]

GEMINI 1 & 2 are two identical, randomized Phase 3 trials evaluating the efficacy and safety of dolutegravir (DTG) 50 mg plus lamivudine (3TC) 300 mg once daily (the components of *Dovato*) to DTG 50 mg once daily plus TDF/FTC once daily in treatment-naive patients ≥18 years with HIV-1. Pooled data are available through 96 weeks.

Baseline stratification factors: plasma HIV-1 RNA (≤100,000 copies/mL vs >100,000 copies/mL) and CD4+ cell count (≤200 cells/mm^3 vs >200 cells/mm^3).

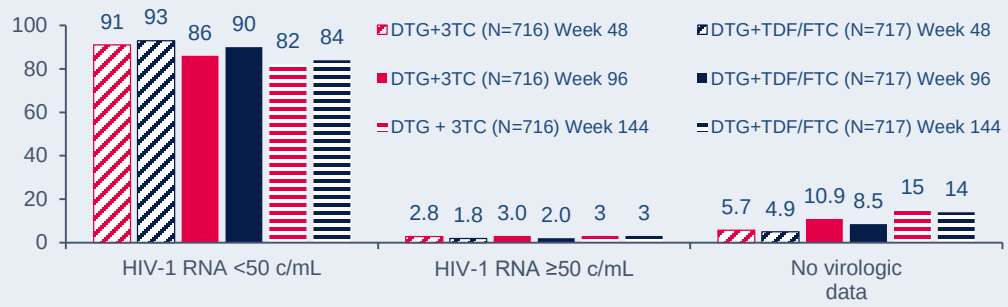


Selected Eligibility criteria

- No evidence of any major resistance-associated mutation (3 [<1%] patients at screening had virus selecting for the M184V resistance mutation and were excluded)[3]
- No HBV infection or need for HCV therapy

Efficacy Results[1,2,4,5]

Pooled Virologic Response Snapshot Analysis, ITT-E Population:



	Adjusted treatment difference (95% CI)[b]
Week 48	-1.7 (-4.4, 1.1)
Week 96	-3.4 (-6.7, 0)
Week 144	1.8 (-5.8, 2.1)

Pooled Virologic Response by Baseline Viral Load and CD4+ T-cell Count at Week 144:

	DTG+3TC (N=716)	DTG+TDF/FDC (N=717)
Baseline HIV-1 RNA, %		
≤100,000	81% (n=576)	84% (n=564)
>100,000	82% (n=140)	84% (n=153)
CD4+ Cell Count, %		
>200	83% (n=653)	84% (n=662)
≤200	67% (n=63)	76% (n=55)

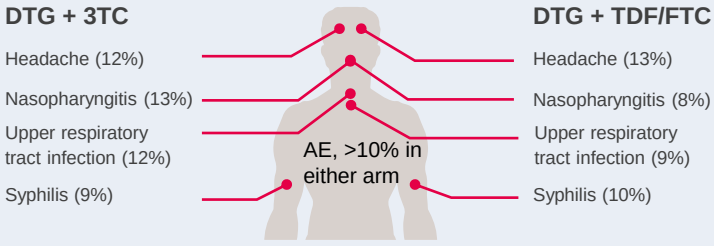
The adjusted mean change[c] from baseline in CD4+ T-cells counts at Week 96:

DTG + 3TC = 269 cells/mm^3

DTG + TDF/FTC = 259 cells/mm^3

Safety Through 144 Weeks (Pooled)[5]

- Grade 2-4 headache was reported in 1% of patients in each group.
- AEs leading to withdrawal from study were similar in both groups: 4% in patients receiving DTG + 3TC and 5% in patients receiving DTG + TDF/FTC.



Virology: Week 144 Pooled Results[1,2,4,5]

- No patients in either treatment group who met CVW[d] criteria (DTG + 3TC: n=12; DTG+ TDF/FTC: n=9) had virus detected with treatment-emergent INSTI or NRTI resistance mutations.
- One non-confirmed virologic withdrawal patient who was non-adherent to DTG + 3TC, developed M184V[e] at Week 132 and R263R/K[f] at Week 144. The patient was withdrawn at Week 144, switched to DTG once daily + darunavir/cobisistat, and regained virological suppression.

Changes in Parameters from Baseline Through Week 144[5]

- Renal biomarkers continued to favor DTG + 3TC
- Increase in bone turnover markers was lower with DTG + 3TC
- Overall mean weight was 3.7 kg with DTG + 3TC and 2.4 kg with DTG + TDF/FTC.

Important safety information is found in the Prescribing Information. For additional information on the use of the components of *Dovato* in treatment naïve patients click MI Letter below.

For more information — MI Letter — Prescribing Information

CLICK FOR ViiV US Medical Portal

Some information contained in this response may not be included in the approved Prescribing Information. This response is not intended to offer recommendations for administering this product in a manner 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 877–844–8872. 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]–10% noninferiority margin for individual studies. [b]Based on Cochran-Mantel-Haenszel stratified analysis adjusting for the following baseline stratification factors: plasma HIV-1 RNA (≤100,000 c/mL vs >100,000 c/mL), CD4+ cell count (≤200 cells/mm^3 vs >200 cells/mm^3), and study (GEMINI-1 vs GEMINI-2). [c]Calculated from a repeated measures model adjusting for study, treatment, visit (repeated factor), baseline plasma HIV-1 RNA, baseline CD4+ T-cell count, treatment and visit interaction, and baseline CD4+ T-cell count and visit interaction. [d]CVW definition: A second and consecutive HIV-1 RNA value met any of the following; i) Decrease from baseline in HIV-1 RNA <1log10 copies/mL, unless <200 copies/mL, by Week 12. ii) confirmed HIV-1 RNA ≥200 copies/mL on or after Week 24. iii) HIV-1 RNA ≥ 200 copies/mL after confirmed consecutive HIV-1 RNA <200 copies/mL. [e]HIV-1 RNA 61,927 c/mL. [f]HIV-1 RNA 135 c/mL.

Abbreviations: 3TC = lamivudine; ADR = adverse drug reaction; AE = adverse event; CVW = confirmed virologic withdrawal; DTG = dolutegravir; FTC = emtricitabine; INSI = Integrase strand transfer inhibitor; ITT = intent-to-treat; NRTI = nucleoside reverse transcriptase inhibitor; TDF = tenofovir disoproxil fumarate; VL = viral load.

References: 1. Cahn P, et al. The Lancet. 2019;393(10167):143-155. **2.** ViiV Healthcare Local Label. **3.** Data on File. 2019N404442_00. **4.** Cahn P, et al. J Acquir Immune Defic Syndr. 2020;83(3):310-318. **5.** Cahn P, et al. AIDS. 2022;36(1):39-48.