ADDITIONAL FILE 1

Table S1. Summary of Study Designs of the Included Trials

Trial name (ClinicalTrials.gov identifier)	**Dosing regimen**	**Primary outcome**
GEMINI-1 and GEMINI-2 (NCT02831673 and NCT02831764)	DTG 50 mg + 3TC 300 mg QD OR DTG 50 mg + TDF 300 mg/FTC 200 mg QD	HIV-1 RNA <50 copies/mL (FDA Snapshot algorithm) at Week 48 in the ITT-E population
GS-US-380-1489 (NCT02607930)	BIC 50 mg/FTC 200 mg/TAF 25 mg QD OR DTG 50 mg/ABC 600 mg/3TC 300 mg QD	HIV-1 RNA <50 copies/mL (FDA Snapshot algorithm) at Week 48
GS-US-380-1490 (NCT02607956)	BIC 50 mg/FTC 200 mg/TAF 25 mg QD OR DTG 50 mg + TAF 25 mg/FTC 200 mg QD	HIV-1 RNA <50 copies/mL (FDA Snapshot algorithm) at Week 48

ABC, abacavir; BIC, bictegravir; DTG, dolutegravir; FDA, US Food and Drug Administration; FTC, emtricitabine; ITT-E, intention-to-treat–exposed; QD, once daily; TAF, tenofovir alafenamide; 3TC, lamivudine; TDF, tenofovir disoproxil fumarate.

Table S2. Summary of Baseline Characteristics of the Included Trials

Baseline parameter, n (%)[a]	GEMINI-1/-2 (pooled analysis)		GS-US-380-1489		GS-US-380-1490	
	DTG + 3TC (N=716)	DTG + TDF/FTC (N=717)	BIC/FTC/TAF (N=314)	DTG/ABC/3TC (N=315)	DTG + TAF/FTC (N=325)	BIC/FTC/TAF (N=320)
Median age, y	32	33	31	32	34	33
Male (sex at birth)	603 (84)	619 (86)	285 (91)	282 (90)	288 (89)	280 (88)
Race						
White	484 (68)	499 (70)	180 (57)	179 (57)	195 (60)	183 (57)
Black or African American	90 (13)	71 (10)	114 (36)	112 (36)	100 (31)	97 (30)
Asian	71 (10)	72 (10)	6 (2)	10 (3)	10 (3)	7 (2)
Other	71 (10)	75 (10)	14 (4)	14 (4)	20 (6)	33 (10)
Ethnicity, Hispanic/Latinx	215 (30)	232 (32)	72 (23)	65 (21)	81 (25)	83 (26)
HIV-1 RNA $\log_{10}$, copies/mL, mean (SD)	4.42 (0.66)	4.45 (0.65)	4.41 (0.65)	4.42 (0.69)	4.42 (0.67)	4.39 (0.73)
Baseline CD4+ cell count, cells/µL, mean (SD)	462 (219.2)	461 (213.1)	453 (220.8)	476 (231.4)	454 (231.5)	457 (255.3)

ABC, abacavir; BIC, bictegravir; DTG, dolutegravir; FTC, emtricitabine; TAF, tenofovir alafenamide; 3TC, lamivudine; TDF, tenofovir disoproxil fumarate.

[a]Unless otherwise specified.

Table S3. Results of the Indirect Treatment Comparison for DTG + 3TC vs BIC/FTC/TAF and DTG/ABC/3TC at Week 144

Comparison	**DTG + 3TC vs BIC/FTC/TAF[a]**			**DTG + 3TC vs DTG/ABC/3TC[b]**		
Comparative effect measure (95% CI)	**Odds ratio**	**Risk difference**	**Mean change difference**	**Odds ratio**	**Risk difference**	**Mean change difference**
Virologic suppression (HIV-1 RNA <50 copies/mL)		0.1% (−6.9%, 7.2%)			−2.5% (−11.6%, 6.7%)	
Virologic failure (HIV-1 RNA ≥50 copies/mL)		−1.3% (−4.8%, 2.1%)			−3.5% (−7.6%, 0.5%)	
CD4+ cell count change from baseline, cells/µL			16.0 (−29.3, 61.3)			−4.0 (−63.5, 55.5)
All-cause discontinuations	0.83 (0.51, 1.37)			0.96 (0.50, 1.85)		
Discontinuations due to AEs	0.94 (0.26, 3.39)			Calculation not possible[c]		
All AEs	1.05 (0.56, 1.98)			0.81 (0.29, 2.27)		
Grade 3-4 AEs	0.70 (0.41, 1.21)			0.71 (0.36, 1.41)		
Serious AEs	**0.51 (0.29, 0.87)**			**0.38 (0.19, 0.75)**		
Drug-related AEs	1.01 (0.66, 1.56)			0.60 (0.35, 1.03)		

ABC, abacavir; AE, adverse event; BIC, bictegravir; DTG, dolutegravir; FTC, emtricitabine; TAF, tenofovir alafenamide; 3TC, lamivudine; TDF, tenofovir disoproxil fumarate.

[a]Indirect comparison based on data from direct comparisons between DTG + 3TC and DTG + TD(A)F/FTC (GEMINI-1 and GEMINI-2) and between BIC/FTC/TAF and DTG + TD(A)F/FTC (GS-US-380-1490). [b]Indirect comparison based on data from direct comparison between BIC/FTC/TAF and DTG/ABC/3TC (GS-US-380-1489) and indirect comparison between DTG + 3TC and BIC/FTC/TAF. [c]Comparison against DTG/ABC/3TC could not be estimated due to zero events in one treatment group.