

Biktarvy[®] (BIC/FTC/TAF) Use in Adults Aged ≥50 Years

This document is in response to your request for information regarding the use of Biktarvy[®] (bictegravir/emtricitabine/tenofovir alafenamide [BIC/FTC/TAF]) in adults aged ≥50 years. This response was developed according to principles of evidence-based medicine and contains data from Gilead clinical trials and real-world studies (N≥350).

Some data may be outside of the US FDA-approved prescribing information. In providing this data, Gilead Sciences, Inc. is not making any representation as to its clinical relevance or to the use of any Gilead product(s). For information about the approved conditions of use of any Gilead drug product, please consult the FDA-approved prescribing information.

The full indication, important safety information, and boxed warnings are available at: www.gilead.com/-/media/files/pdfs/medicines/hiv/biktarvy/biktarvy_pi.

Summary

Product Labeling¹

Clinical trials in VS participants (Trials 4449, 1844, and 1878) included 111 subjects aged ≥65 years who received BIC/FTC/TAF, including 86 participants from an open-label, single-arm trial of subjects aged ≥65 years who were switched from their previous ARV regimen to BIC/FTC/TAF. Of the total number of BIC/FTC/TAF-treated patients in these trials, 100 (90%) were 65 to 74 years of age, and 11 (10%) were 75 to 84 years of age. No overall differences in safety or effectiveness were observed between elderly participants and adults between 18 and <65 years of age, and other reported clinical experience has not identified differences in responses between the elderly and younger patients, but greater sensitivity of some older individuals cannot be ruled out.

The pharmacokinetics of BIC, FTC, and TAF have not been fully evaluated in the elderly (≥65 years of age). Population pharmacokinetics analysis of HIV-infected participants in phase 3 trials of BIC/FTC/TAF showed that age did not have a clinically relevant effect on exposures of BIC and TAF up to 74 years of age.

Clinical Studies: BIC/FTC/TAF Use in Adults Aged ≥50 Years

In several clinical studies that included PWH who initiated or switched to BIC/FTC/TAF, high rates of virologic suppression (HIV-1 RNA <50 c/mL) were observed at various time points (Weeks 24, 48, 72, 96, or 240) in those aged \geq 50 years. Overall, there were low rates of discontinuation due to AEs, with no BIC/FTC/TAF-related discontinuations due to renal, bone, or hepatic AEs. $\frac{2-4}{2}$

Real-World Data: BIC/FTC/TAF Use in Adults Aged ≥50 Years

In one prospective and three retrospective studies, overall virologic suppression rates with BIC/FTC/TAF were high (92.6–96%) at various time points (Weeks 24, 48, or 96) among PWH aged \geq 50 years. In studies that reported safety outcomes, rates of AEs and treatment discontinuations due to AEs varied by study, and eGFR decreases or no changes from BL were reported. $\frac{5-9}{2}$

Clinical Studies: BIC/FTC/TAF Use in Adults Aged ≥50 Years

Pooled Analysis of Six Phase 3 Clinical Trials

Studies in ARV-naive participants

Study design and demographics

Data from two randomized, double-blind, active-controlled, non-inferiority phase 3 studies in ARV-naive participants (Studies 1489 and 1490) that evaluated the efficacy and safety of BIC/FTC/TAF were pooled in post hoc analyses to compare results in participants aged ≥50 years with those of participants aged <50 years (Figure 1).²

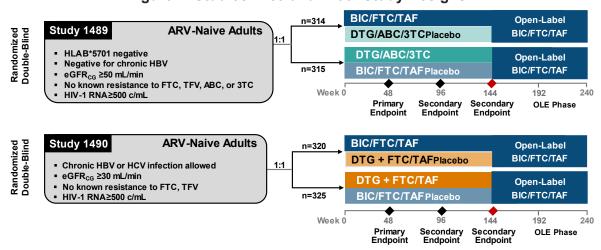


Figure 1. Studies 1489 and 1490: Study Designs^{2,10,11}

Abbreviations: HLA=human leukocyte antigen; OLE=open-label extension; TFV=tenofovir.

Table 1. Studies 1489 and 1490: BL Demographics and Disease Characteristics²

Key Demogra	phics and Characteristics	Aged ≥50 Years (n=96)	Aged <50 Years (n=538)
Age, median (Q	1, Q3), years	55 (52, 60)	30 (25, 37)
Male sex at birth	n, n (%)	81 (84.4)	484 (90)
Pagion n (%)	US	56 (58.3)	365 (67.8)
Region, n (%)	Outside US	40 (41.7)	173 (32.2)
	White	59 (61.5)	304 (56.5)
Race, n (%)	Black	30 (31.3)	181 (33.7)
	Othera	4 (4.2) ^b	36 (6.7) ^b
Hispanic or Latin	x ethnicity, n (%)	11 (11.5)	144 (26.9) ^b
HIV-1 RNA >100	,000 c/mL, n (%)	23 (24)	96 (17.8)
CD4 count, medi	an (IQR), cells/mcL	436 (235–601)	442 (299–590)
	Hypertension	46 (47.9)	52 (9.7)
Medical history, n (%)	Hyperlipidemia	39 (40.6)	48 (8.9)
	Diabetes mellitus	16 (16.7)	22 (4.1)
	Cardiovascular disease	6 (6.3)	8 (1.5)

^aIncluded American Indican or Alaska Native, Asian, Native Hawaiian or Pacific Islander, and other.

^bData were missing for 1 participant.

Efficacy results at Week 240²

At Week 240, rates of virologic suppression (HIV-1 RNA <50 c/mL) were high in both age groups and did not differ significantly between groups (Table 2).

Table 2. Studies 1489 and 1490: Rates of Virologic Suppression at Week 240²

HIV-1 RNA <50 c/mL, n/N (%)	Aged ≥50 Years	Aged <50 Years	P-Value
M=E analysis	67/68 (98.5)	359/364 (98.6)	0.9139
M=F analysis	67/96 (69.8)	359/538 (66.7)	0.5

Abbreviation: M=F=missing=failure.

Significantly more participants aged \geq 50 years had \geq 95% adherence than those <50 years (82.8% vs 66.3%, respectively; P=0.002). From BL to Week 240, CD4 cell counts increased in both age groups, with a mean \pm SD increase of 291 \pm 221.3 cells/mcL in participants aged \geq 50 years and 347 \pm 238.2 cells/mcL in participants aged <50 years (LSMD [range], -58 [-120 to 4]; P=0.07).

Safety results through Week 240²

Through Week 240, rates of TEAEs were similar between age groups (Table 3).

Table 3. Studies 1489 and 1490: Safety Results Through Week 240²

Safety Parameters, n (%)	Aged ≥50 Years (n=96)	Aged <50 Years (n=538)
Any TEAE	90 (93.8)	514 (95.5)
Study drug-related TEAEs	25 (26)	153 (28.4)
Any Grade 3 or 4 TEAEs	30 (31.3)	102 (19)
Study drug-related Grade 3 or 4 TEAEs	4 (4.2) ^a	5 (0.9) ^b
Any serious TEAE	33 (34.4)	103 (19.1)
Study drug-related serious TEAEs	2 (2.1) ^c	3 (0.6) ^d
Discontinuations due to TEAEs	4 (4.2) ^e	6 (1.1) ^f
Deaths	6 (6.3) ^g	2 (0.4) ^h

^aAbdominal pain, atypical chest pain, and elevated liver enzymes (each, n=1) and atrial flutter, dizziness, and acute pancreatitis (n=1).

The mean changes from BL in hip and spine BMD were reported to be minimal and were similar between participants aged ≥50 years vs >50 years at Week 240 (hip, 0.3% vs -0.4%; spine, 1.3% vs -0.9%, respectively). Rates of treatment-emergent diabetes (5.1% vs 1.7%) and hypertension (19.6% vs 12.5%) were also numerically higher in those aged ≥50 years than in those aged <50 years.

^bAbdominal distention, diarrhea, generalized tonic-clonic seizure, osteoporosis, and suicide attempt (each, n=1).

^cAtrial flutter, acute pancreatitis, and dizziness (n=1) and chest pain (n=1).

^dGeneralized tonic-clonic seizure, spontaneous abortion, and suicide attempt (each, n=1).

eCardiac arrest, chest pain, COVID, and obesity (each, n=1).

^fAbdominal distention, dyspepsia, toxicity due to various agents, intervertebral discitis, and tension headache (each, n=1).

⁹Cardiac arrest (n=2), hypertensive heart disease with congestive heart failure, poorly differentiated gastric adenocarcinoma, COVID, and drug toxicity (each, n=1).

^hHemorrhagic hypovolemia (self-inflicted) and unknown cause (each, n=1).

Table 4. Studies 1489 and 1490: Change in Renal and Metabolic Parameters From BL to Week 240²

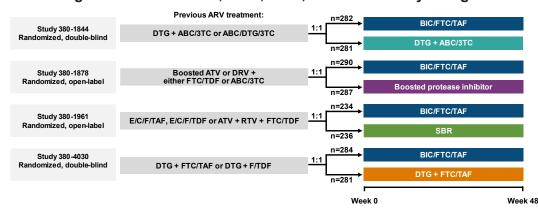
	Aged ≥50 Years			Aged <50 Years	
	n	Median (Q1, Q3)	n	Median (Q1, Q3)	<i>P</i> -Value
eGFR _{CG} , mL/min	67	-10.5 (-19.6, 2.4)	363	-7.7 (-19.4, 3)	0.3003
Body weight, kg	68	4.8 (0.7, 10.2)	363	6.4 (2.4, 12)	0.087
TC:HDL ratio	65	-0.3 (-0.9, 0.4)	345	0.1 (-0.4, 0.6)	0.0044

Studies in VS participants

Study design and demographics

Data from four phase 3, randomized trials of VS adults who switched to BIC/FTC/TAF (Studies 1844, 1878, 1961, and 4030) were pooled in a post hoc analysis to assess efficacy and safety outcomes in PWH aged ≥50 years and <50 years (Figure 2). Comorbidities such as diabetes, cardiovascular disease, hyperlipidemia, and hypertension were more frequent in participants aged ≥50 years (Table 5).²

Figure 2. Studies 1844, 1878, 1961, and 4030: Study Designs^{2,10,12}



Abbreviations: ATV=atazanavir; DRV=darunavir; RTV=ritonavir; SBR=stay on BL regimen.

Table 5. Studies 1844, 1878, 1961, and 4030: BL Demographics and Disease Characteristics²

Key Demogra	phics and Characteristics	Aged ≥50 Years (n=450)	Aged <50 Years (n=640)
Age, median (Q	1, Q3), years	56 (52, 60)	39 (33, 45)
Male sex at birth	ı, n (%)	342 (76)	393 (61.4)
Pagion n (0/)	US	327 (72.7)	294 (45.9)
Region, n (%)	Outside US	123 (27.3)	346 (54.1)
	White	291 (64.7)	369 (57.7)
Race, n (%)	Black	131 (29.1)	166 (25.9)
	Othera	17 (3.8) ^b	38 (5.9) ^b
Hispanic or Latin	x ethnicity, n (%)	72 (16) ^b	131 (20.5)°
HIV-1 RNA <50 d	c/mL, n (%)	441 (98)	632 (98.8)
CD4 count, medi	an (IQR), cells/mcL	640 (486–852)	691 (523–887)
	Hyperlipidemia	220 (48.9)	121 (18.9)
Medical history, n (%)	Hypertension	182 (40.4)	111 (17.3)
	Diabetes mellitus	76 (16.9)	38 (5.9)
	Cardiovascular disease	50 (11.1)	15 (2.3)

^aIncludes American Indian or Alaska Native, Asian, Native Hawaiian, or Pacific Islander, and other.

^bData were missing for 1 participant. ^cData were missing for 2 participants.

Efficacy results at Week 482

At Week 48, 93.6% of participants in both age groups maintained virologic suppression (HIV-1 RNA <50 c/mL) by FDA Snapshot analysis (Table 6).

Table 6. Studies 1844, 1878, 1961, and 4030: Virologic Outcomes at Week 48 (FDA Snapshot Analysis)²

Outcome, n (%)	Aged ≥50 Years (n=450)	Aged <50 Years (n=640)	<i>P</i> -Value
HIV-1 RNA <50 c/mL	421 (93.6)	599 (93.6)	1
HIV-1 RNA ≥50 c/mL	4 (0.9)	9 (1.4)	0.58

Overall, 83.7% of participants aged \geq 50 years and 85.3% of participants aged <50 years reported \geq 95% adherence through Week 48. From BL to Week 48, CD4 cell counts increased in both age groups, with a mean \pm SD increase of 18 \pm 162.5 cells/mcL in participants aged \geq 50 years and 4 \pm 174.9 cells/mcL in participants aged <50 years (LSMD [range], 15 [-7 to 36]; P=0.18).

Safety results through Week 48²

Through Week 48, rates of TEAEs were similar between age groups (Table 7).

Table 7. Studies 1844, 1878, 1961, and 4030: Safety Results Through Week 48²

Safety Parameters, n (%)	Aged ≥50 Years (n=450)	Aged <50 Years (n=640)
Any TEAE	354 (78.7)	494 (77.2)
Study drug-related TEAEs	58 (12.9)	80 (12.5)
Any Grade 3 or 4 TEAE	33 (7.3)	30 (4.7)
Study drug-related Grade 3 or 4 TEAEs	3 (0.7)	4 (0.6)
Any serious TEAE	39 (8.7)	30 (4.7)
Study drug-related serious TEAEs	1 (0.2)	1 (0.2)
Discontinuations due to TEAEs	8 (1.8)	6 (0.9)
Deaths	2 (0.4)	2 (0.3)

Mean changes in hip and spine BMD from BL to Week 48 were similar between participants aged ≥ 50 vs < 50 years (hip, 0.2% vs 0.1%; spine, 0.5% vs 0.8%, respectively). Changes in eGFR_{CG} and metabolic parameters were minimal in both groups (Table 8). More participants aged ≥ 50 years initiated lipid-modifying agents through Week 48 (5.3%) than did those aged < 50 years (0.8%; P < 0.0001). Rates of treatment-emergent diabetes (1.1% vs 1.3%) and hypertension (5.2% vs 2.6%) were similar in participants aged ≥ 50 years vs < 50 years (between groups, P > 0.05 each).

Table 8. Studies 1844, 1878, 1961, and 4030: Change in Renal and Metabolic Parameters From BL to Week 48²

	Aged ≥50 Years			Aged <50 Years	
	n	Median (Q1, Q3)	n	Median (Q1, Q3)	<i>P</i> -Value
eGFR _{CG} , mL/min	422	-0.9 (-8.1, 5.8)	603	-1 (-9.6, 8.4)	0.9223
Body weight, kg	429	1.5 (-0.8, 3.8)	609	1.8 (-0.4, 4)	0.2857
TC:HDL ratio	412	-0.1 (-0.5, 0.4)	593	0 (-0.4, 0.3)	0.933

BIC/FTC/TAF Study in African PWH Aged ≥60 Years

Study design and demographics³

A randomized, open-label, active-controlled, non-inferiority, 96-week study in Kenya compared the efficacy and safety of switching from a first-line regimen to BIC/FTC/TAF (n=260) vs continuing on the current regimen (CAR group; n=260). Eligible participants were PWH aged ≥60 years who had HIV-1 RNA <50 c/mL for ≥12 weeks, had received an ARV regimen for ≥24 weeks, and had no prior history of VF. The co-primary endpoints at Week 48 were the proportion of participants with HIV-1 RNA ≥50 c/mL via FDA Snapshot analysis (ITT population; non-inferiority margin, 4%) and the mean percent change in lumbar spine BMD from BL in a subset of participants (BIC/FTC/TAF, n=143; CAR, n=153).

BL demographics and characteristics in the BIC/FTC/TAF and CAR groups included the following: median age of 64 and 63 years, respectively; 48% and 55% females; median of 9.5 years on ART in each group; and 94% and 96% currently receiving a TDF-based regimen.

Results at Week 48³

At Week 48, virologic suppression rates (HIV-1 RNA <50 c/mL) in the BIC/FTC/TAF and CAR groups were 95.8% and 96.2%, respectively. No virologic data were available for 2.3% and 1.1% of participants in the BIC/FTC/TAF and CAR groups, respectively. Five participants (1.9%) in the BIC/FTC/TAF group and 7 participants (2.7%) in the CAR group had HIV-1 RNA ≥50 c/mL; the between-group difference for these data met the threshold for non-inferiority (difference, -0.8%; 95% CI: -3.4 to 1.8). No participants underwent drug resistance testing (HIV-1 RNA levels were <500 c/mL).

The mean ± SD percent change in lumbar spine BMD from BL to Week 48 was significantly greater in the BIC/FTC/TAF group than in the CAR group: +2.17±5.23% vs +0.61±5.44%; difference: 1.56%; 95% CI: 0.32–2.79; *P*=0.014).

No treatment-related SAEs occurred, and Grade 3/4 AEs were reported in 3.1% and 2.3% of participants in the BIC/FTC/TAF and CAR groups, respectively.

Results at Week 96¹³

At Week 96, virologic suppression was achieved by 92.3% in the BIC/FTC/TAF group and 94.2% in the CAR group, and no virologic data were available for 5% and 3.1% of participants, respectively. Seven participants (2.7%) in each group had HIV-1 RNA ≥50 c/mL; the between-group difference for these data met the threshold for non-inferiority (difference, 0%; 95% CI: -2.8 to 2.8).

The mean \pm SD change in lumbar spine BMD from BL to Week 96 was $\pm 3.98\pm 6.1\%$ in the BIC/FTC/TAF group and $\pm 2.29\pm 6.02\%$ in the CAR group (difference, 1.7; 95% CI: 0.25–3.14; P=0.021).

No treatment-related SAEs were reported in either group. One participant (0.4%) in the BIC/FTC/TAF group discontinued due to tuberculosis, and 30 participants (11.5%) in the CAR group discontinued due to declining kidney function. The change in CrCl from BL to Week 96 was 1.7% in the BIC/FTC/TAF group and -3.5% in the CAR group. The change in weight from BL to Week 96 was 0% in the BIC/FTC/TAF group and -2.6% in the CAR group; a weight gain of >5% was reported in 13.4% and 6.4%, respectively. In the BIC/FTC/TAF group, incident hypertension and incident dyslipidemia were reported in 60/166 (51.7%) and

69/207 (33.3%) participants, respectively; rates in the CAR group were 46/100 (49.1%) and 58/218 (26.6%).

Study GS-US-380-4449

Study design and demographics

Study GS-US-380-4449 was a multicenter, open-label, single-arm, phase 3b study that evaluated the efficacy, safety, and tolerability of switching to BIC/FTC/TAF in VS PWH aged ≥65 years age (Figure 3).⁴

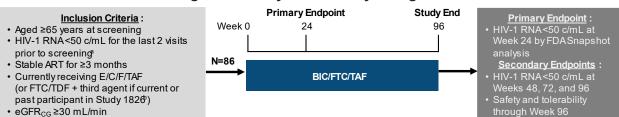


Figure 3. Study 4449: Study Design^{4,14}

^bStudy GS-US-292-1826 was an open-label, randomized, 48-week study that evaluated the efficacy and safety of switching from a TDF-based regimen to E/C/F/TAF in participants ≥60 years of age.

Key Demographic	BIC/FTC/TAF (N=86)	
Age, median (IQR), years		69 (67–72)
Female, n (%)		11 (13)
Race, White/Black, a n (%)		82 (95)/1 (1)
HIV-1 RNA <50 c/mL at BL, n (%)	84 (98)
CD4 count, median (IQR), cells	/mm³	676 (515–829)
eGFR _{CG} , median (IQR), mL/mir		76 (65–88)
Weight, median (IQR), kg		78 (69–87)
	E/C/F/TAF	79 (92)
BL regimen, n (%)	RPV/FTC/TDF	4 (5)
	Other ^b	3 (4)

Table 9. Study 4449: BL Demographics and Disease Characteristics⁴

Efficacy results through Week 96

High rates of virologic suppression (HIV-1 RNA <50 c/mL) were maintained at the Week 24 primary endpoint (97.7%; 95% CI: 91.9–99.7) and at the secondary endpoints at Weeks 48 (90.7%), 72 (94.2%), and 96 (74.4%; Figure 4). $\frac{4.15}{1}$ The number of missing virologic data at Week 96 (n=22) was largely due to the impact of the COVID-19 pandemic on study visits. The median (IQR) change from BL in CD4 count was -3 (-59 to 91) cells/mm³ at Week 96 (n=59). $\frac{14}{1}$

Through Week 96, no participants met the criteria for resistance testing, and no treatment-emergent resistance was observed. Participants with pre-existing resistance maintained suppression through Week 96.4

^aTransient detectable viremic "blips" (HIV-1 RNA ≥50 c/mL and <400 c/mL) were acceptable.

Abbreviations: EFV=efavirenz; NVP=nevirapine; RPV=rilpivirine.

^aThree participants did not disclose their race.

^bOther BL regimens included EFV/FTC/TDF (n=1), E/C/F/TDF (n=1), and NVP + FTC/TDF (n=1).

100 91 90 74 ■ Week 24 80 ■ Week 48 70 Participants, ■ Week 72 60 Week 96 50 40 26 30 20 10 0 HIV-1 RNA <50 c/mL HIV-1 RNA ≥50 c/mL

No Virologic Data

Figure 4. Study 4449: Efficacy Outcomes Through Week 964,15

Safety results through Week 96

Most treatment-emergent AEs were Grade 1 or 2 (Table 10). None of the SAEs (10.5%) were considered related to study drug. There were no discontinuations due to renal, bone, or hepatic AEs.4

Table 10. Study 4449: Summary of Safety Results Through Week 964

Safety Parameters, n (%)	BIC/FTC/TAF (N=86)
Any Grade 3 or 4 AE	15 (17.4)
Study drug-related AE	11 (12.8)
AEs leading to study drug discontinuation	5 (5.8) ^a

^aAEs attributed to study drug: abdominal discomfort, weight gain, irritability and sleep disorder; not attributed to study drug: drug withdrawal syndrome and alcohol withdrawal syndrome.

The median (IQR) change in weight from BL to Week 96 was 0 (-2.3 to 2) kg. At Week 96, RBP:Cr decreased by a median of 16.4% (BL, 139.3 mcg/g), and β2M:Cr increased by a median of 18.7% (BL, 72 mcg/g). 4.14 Median change in eGFR_{CG} from BL to Week 48 was -6 mL/min and remained stable through Week 96.4.15 Changes in metabolic parameters (Table 11) were deemed by study authors to be clinically irrelevant. 4

Table 11. Study 4449: Changes in Fasting Lipids at Week 96 (n=56)⁴

Lipid Parameter	BL	Median Change From BL	<i>P</i> -Value
TC, mg/dL	191	-15	0.066
LDL, mg/dL	117	-10	0.069
HDL, mg/dL	51	-1	0.54
TG, mg/dL	131	-19	0.001
TC:HDL	3.9	-0.2	0.029

Abbreviation: TG=triglycerides.

Real-World Data: BIC/FTC/TAF Use in Adults Aged ≥50 Years

Key real-world studies are presented in Table 12. Data may not be all-inclusive.

Table 12. Summary of Real-World Studies in PWH Age ≥50 Years 5-8

Study Design	Study	Efficacy Results of PWH	Safety Results
Retrospective, multicenter, observational cohort study in Belgium (Nasreddine, 2023) ⁵	Population 2001 adult PWH who received BIC/FTC/TAF; 41% were aged ≥50 years, 80% were TE, and 68.1% were VS at BL	Aged ≥50 Years • At Wk 24, 92.6% (n=672) had VL <50 c/mL • At Wk 48, 92.7% (n=576) had VL <50 c/mL • Median (IQR) change from BL in CD4 count was 50 (-50 to 172) cells/mcL • Five patients had loss of virologic suppression; no treatment-emergent RAMs were reported. At BL, 4/5 participants were TE, 2 were not VS, 2 experienced a viral blip, and 1 had BL RAMs	 Overall, 131 patients (6.5%) discontinued treatment, mainly due to AEs (2.4%) or switch to a two-drug regimen (1.3%) In patients aged >50 years, the median (IQR) increase in weight from BL at Wk 48 was 1 (-1 to +4) kg Age >50 years was not associated with weight gain of >10% (P=0.16)
RETROBIC study: retrospective, multicenter study in Spain (Troya, 2024) ⁶	1966 VS PWH who switched to BIC/FTC/TAF; 16.8% (n=330) were aged ≥60 years	 CD4 counts increased from BL to Wk 96 (P<0.01) CD8 counts decreased from BL to Wk 48 (P<0.01) CD4/CD8 ratio improved from BL to Wk 48 (P<0.01) VL <50 c/mL or <200 c/mL: 94% at Wk 48 and 94.9% at Wk 96 	 Overall, 50 patients (2.5%) had major AEs, and 200 patients (10.2%) discontinued treatment: switch to two-drug regimen (3.8%), AEs (2.3%), loss to follow-up (2.1%), drug-drug interaction (1%), and VF (0.91%) Among patients ≥60 years of age, TC levels decreased significantly from BL to Week 48 (<i>P</i><0.01), and LDL levels decreased from BL to Week 48.
REGAL cohort: a retrospective, multinational study (Fraysse, 2025) ⁹	1144 VS PWH aged ≥50 years at time of BIC/FTC/TAF (n=551) or DTG/3TC (n=593) initiation	 From BL to 288 weeks of BIC/FTC/TAF treatment, there was 1 case (0.2%) of VF (IR of VF per 100 PY, 0.7) From BL to Wk 48, the median (IQR) change in CD4 count was 4 (-79 to 100) cells/mm³ Median CD4/CD8 ratio remained stable from BL to Wk 96 	 Of the patients who received BIC/FTC/TAF, 23 patients (4.2%) switched, changed, or discontinued treatment; and 10 patients (1.8%) were lost to follow-up. No deaths were reported. Biomarkers of hepatic function remained stable through 96 weeks
BICSTaR study: ongoing prospective, multinational, observational cohort study (Miralles, 2024) ^Z	401 PWH aged ≥50 years with a high comorbidity burden at BL who switched to BIC/FTC/TAF	Through 24 months of treatment, 96% had VL <50 c/mL (M=E analysis), and 90% continued to receive BIC/FTC/TAF	Cardiometabolic, hepatic, and renal parameters remained stable BIC/FTC/TAF was generally well tolerated
Retrospective cohort study (Rolle, 2020) ⁸	350 PWH aged ≥50 years who were VS within 1 year prior to switching to BIC/FTC/TAF	At Wk 48, 94% (n/N=330/350) had VL <50 c/mL, including 88% (23/26) with BL M184V/I mutations and 89% with ≥1 NRTI RAMs CD4 counts were numerically higher at Wk 48 than at BL	 Drug-related AEs were reported in 15%; most common were fatigue (4%), arthralgia (3%), and weight gain (3%) Drug-related AEs led to discontinuation in 8 patients (2%) Grade 3 to 4 laboratory abnormalities were reported in 25 patients (7%) Significant improvements in lipid parameters were observed through Wk 48 (all <i>P</i>≤0.017)

Abbreviations: NRTI=nucleos(t)ide reverse transcriptase inhibitor; RAM=resistance-associated mutation; VL=viral load.

References

- 1. Enclosed, Gilead Sciences Inc. BIKTARVY® (bictegravir, emtricitabine, and tenofovir alafenamide) tablets, for oral use. US Prescribing Information. Foster City, CA.
- 2. Kityo CM, Gupta SK, Kumar PN, et al. Efficacy and safety of B/F/TAF in treatment-naïve and virologically suppressed people with HIV ≥ 50 years of age: integrated analysis from six phase 3 clinical trials. *BMC Infectious Diseases*. 2025;25(1):1061.
- 3. Ombajo LA, Penner J, Nkuranga J, et al. A Randomized Trial Switching Adults ≥ 60 Years Old From First-Line ART to B/F/TAF: Week 48 Results [Poster 00643]. Paper presented at: Conference on Retroviruses and Opportunistic Infections (CROI); March 3-6, 2024; Denver, CO.
- 4. Maggiolo F, Rizzardini G, Molina JM, et al. Bictegravir/emtricitabine/tenofovir alafenamide in older individuals with HIV: Results of a 96-week, phase 3b, open-label, switch trial in virologically suppressed people >/=65 years of age. *HIV Med.* 2022.
- 5. Nasreddine R, Florence E, Yombi JC, et al. Efficacy, durability, and tolerability of bictegravir/emtricitabine/tenofovir alafenamide for the treatment of HIV in a real-world setting in Belgium. *HIV Med.* 2023;24(8):914-924.
- 6. Troya J, Pousada G, Mican R, et al. Real-life data of immune recovery using bictegravir/emtricitabine/tenofovir alafenamide in virologically suppressed people living with HIV. Results at 48-96 weeks of RETROBIC Study. *J Antimicrob Chemother*. 2024;79(3):595-607.
- 7. Miralles C, van Welzen B, McConkey S, et al. Switching to B/F/TAF in a Real-World Cohort of Older People With HIV and a High Burden of Non–AIDS-Related Comorbidities [Poster TUPEB072]. Paper presented at: 25th International AIDS Conference; July 22-26, 2024; Munich, Germany.
- 8. Rolle CP, Nguyen V, Patel K, Cruz D, Hinestrosa F, DeJesus E. Efficacy, safety and tolerability of switching to bictegravir/emtricitabine/tenofovir alafenamide (B/F/TAF) in HIV-1 infected virologically-suppressed older adults in a real-world setting [Poster 897388]. Paper presented at: IDWeek Virtual; 21-25 October, 2020.
- 9. Fraysse J, Jones B, Kuretski J, et al. The Global REGAL Cohort: A Retrospective Real-world Study of the Effectiveness and Tolerability of the Antiretroviral Treatment Regimens DTG/3TC Compared to BIC/FTC/TAF in Older Persons Living With HIV [Poster P-357]. Paper presented at: IDWeek; October 19-22, 2025; Atlanta, GA.
- 10. Kityo CM, Gupta SK, Kumar PN, et al. Efficacy and safety of B/F/TAF in treatment-naïve and virologically suppressed people with HIV ≥ 50 years of age: integrated analysis from six phase 3 clinical trials [Supplemental Material]. *BMC Infectious Diseases*. 2025;25(1):1061.
- 11. Kityo CM, Gupta SK, Kumar PN, et al. Efficacy and Safety of B/F/TAF in Treatment-Naïve People With HIV Aged ≥ 50 Years: 5-Year Follow-Up From Two Phase 3 Studies [Poster P-547]. Paper presented at: IDWeek; October 16-19, 2024; Los Angeles, CA.
- 12. Kityo CM, Gupta SK, Kumar PN, et al. Efficacy and Safety of Bictegravir/Emtricitabine/Tenofovir Alafenamide in Virologically Suppressed People With HIV Aged ≥ 50 Years:48-Week Follow-Up From Four Phase 3 Studies [Poster 52]. Paper presented at: International Workshop on Aging & HIV; 24–25 October, 2024; Washington, DC.
- 13. Ombajo LA, Penner J, Nkuranga J, et al. Switch of Virally Suppressed Adults ≥ 60 Years From First-Line ART to B/F/TAF: Week 96 Results [Poster 0660]. Paper presented at: Conference on Retroviruses and Opportunistic Infections (CROI); March 9-12, 2025; San Francisco, CA.
- 14. Maggiolo F, Rizzardini G, Molina JM, et al. Switching to bictegravir/emtricitabine/tenofovir alafenamide (B/F/TAF) in adults aged 65 years or older: Week 96 results from an international, phase 3b, open-label trial (GS-US-380-4449) [Presentation]. Paper presented at: 11th International AIDS Society (IAS) Conference on HIV Science Virtual; 18-21 July, 2021.
- 15. Maggiolo F, Rizzardini G, Molina JM, et al. Bictegravir/Emtricitabine/Tenofovir Alafenamide in Virologically Suppressed People with HIV Aged >/= 65 Years: Week 48 Results of a Phase 3b, Open-Label Trial. *Infect Dis Ther.* 2021;10(2):775-788.

Abbreviations

β2M=β2 microglobulin 3TC=lamivudine ABC=abacavir AE=adverse event ART=antiretroviral therapy ARV=antiretroviral BIC=bictegravir BL=baseline BMD=bone mineral density c/mL=copies/mL CAR=continue antiretroviral regimen CD4/8=cluster of differentiation 4/8 CG=Cockcroft-Gault DTG=dolutegravir E/C/F=elvitegravir/cobicistat/emtricitabine FTC=emtricitabine LSMD=least squares mean difference M=E=missing=excluded PWH=people with HIV Q=quartile RBP=retinol-binding protein

SAE=serious adverse
event
TAF=tenofovir
alafenamide
TC=total cholesterol
TDF=tenofovir disoproxil
fumarate
TEAE=treatmentemergent adverse event
VF=virologic failure
VS=virologically
suppressed

Product Label

For the full indication, important safety information, and boxed warning(s), please refer to the Biktarvy US Prescribing Information available at: www.gilead.com/-/media/files/pdfs/medicines/hiv/biktarvy/biktarvy pi.

Follow-Up

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2 1-866-MEDI-GSI (1-866-633-4474) or 🕆 www.askgileadmedical.com

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