

Online Supplementary Material

Real-World Analysis of Weight Gain and Body Mass Index Increase Among Patients With HIV-1 Using Antiretroviral Regimen Containing Tenofovir Alafenamide, Tenofovir Disoproxil Fumarate, or Neither in the United States. *JHEOR*. 2022;9(1):39-49. [doi:10.36469/jheor.2022.31825](https://doi.org/10.36469/jheor.2022.31825)

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This supplementary material has been provided by the authors to give readers additional information about their work.



Table S1. ART Regimens Included in Each Study Cohort

TAF 10 mg	TAF 25 mg	TDF	Non-TDF/TAF
Darunavir/cobicistat/FTC/TAF (STR)	Bictegravir/FTC/TAF (STR)	Elvitegravir/cobicistat/FTC/TDF (STR)	Dolutegravir/lamivudine (STR)
Elvitegravir/cobicistat/FTC/TAF (STR)	Dolutegravir + FTC/TAF (25 mg) (MTR)	Dolutegravir + FTC/TDF (MTR)	Dolutegravir/abacavir/lamivudine (STR)
	Raltegravir + FTC/TAF (25 mg) (MTR)	Dolutegravir + TDF + lamivudine (MTR)	Dolutegravir/rilpivirine (STR) or dolutegravir + rilpivirine (MTR)
	Darunavir/cobicistat + FTC/TAF (25 mg) (MTR)	Raltegravir + FTC/TDF (MTR)	Darunavir/cobicistat + abacavir/lamivudine (MTR)
	Atazanavir/cobicistat + FTC/TAF (25 mg) (MTR)	Raltegravir + TDF + lamivudine (MTR)	Darunavir/cobicistat + lamivudine (MTR)
	Doravirine + FTC/TAF (25 mg) (MTR)	Darunavir/cobicistat + FTC/TDF (MTR)	Darunavir/cobicistat + raltegravir (MTR)
	Rilpivirine/FTC/TAF (STR)	Darunavir/cobicistat + TDF + lamivudine (MTR)	
	Efavirenz + FTC/TAF (25 mg) (MTR)	Atazanavir/cobicistat + FTC/TDF (MTR)	
		Atazanavir/cobicistat + TDF + lamivudine (MTR)	
		Doravirine/TDF/lamivudine (STR) or Doravirine + TDF/lamivudine (MTR)	
		Rilpivirine/FTC/TDF (STR)	
		Efavirenz/FTC/TDF (STR) or Efavirenz + FTC/TDF (MTR)	
		Efavirenz/TDF/lamivudine (STR)	

Abbreviations: ART, antiretroviral therapy; FTC, emtricitabine; MTR, multiple-tablet regimen; STR, single-tablet regimen; TAF, tenofovir alafenamide; TDF, tenofovir disoproxil fumarate.

Table S2. Mental Health–Related Comorbidities

Anxiety disorders	Other conditions that may require a focus of clinical attention
Bipolar and related disorders	Other mental disorders
Depressive disorders	Paraphilic disorders
Disruptive, impulse-control, and conduct disorders	Personality disorders
Dissociative disorders	Schizophrenia spectrum and other psychotic disorders
Elimination disorders	Sexual dysfunctions
Feeding and eating disorders	Sleep-wake disorders
Gender dysphoria	Somatic symptom and related disorders
Medication-induced movement disorders and other adverse effects of medication	Substance-related and addictive disorders
Neurocognitive disorders	Trauma- and stressor-related disorders
Neurodevelopmental disorders	
Obsessive-compulsive and related disorders	

Source: American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition)*, 2013.

Table S3. Medication Classes and Agents Associated With Weight Change

Antidiabetics
Biguanides/meglitinides
Insulins
Sulfonylureas
Dipeptidyl peptidase-4 (DPP-4) inhibitors
Thiazolidinediones
Glucagon-like peptide-1 (GLP-1) agonists
α -Glucosidase inhibitors
Other antidiabetic medications
Antihyperlipidemics
Antihypertensives
Appetite stimulants/suppressants
Amphetamine/dextroamphetamine
Phentermine
Dronabinol
Methylphenidate
Megestrol
Oxandrolone
Topiramate
β -Blockers
Corticosteroids
Hormonal therapies
Psychiatric/neurologic therapies
Antidepressants
Anticonvulsants
Antipsychotics

Table S4. Unadjusted Mean Weight and BMI in Pre- and Post-index Periods

	TAF 25 mg Cohort	TAF 10 mg Cohort	TDF Cohort	Non-TAF/TDF Cohort
3 Months				
Weight				
Patients with both baseline and follow-up measurements, n	n=477	n=201	n=140	n=271
Weight (kg) pre-index, mean±SD [median]	84.37±18.90 [81.92]	84.92±21.10 [81.48]	83.11±19.06 [81.79]	83.43±18.85 [81.92]
Weight (kg) at 3 months post-index, mean±SD [median]	85.20±18.90 [83.00]	85.34±21.34 [83.01]	83.04±17.74 [83.28]	83.71±18.88 [81.92]
BMI				
Patients with both baseline and follow-up measurements, n	n=467	n=196	n=136	n=266
BMI (kg/m ²) pre-index, mean±SD [median]	28.24±6.20 [27.12]	29.08±10.10 [27.22]	28.26±5.92 [27.60]	27.93±5.97 [26.95]
BMI (kg/m ²) at 3 months post-index, mean±SD [median]	28.57±6.30 [27.26]	28.79±6.49 [27.23]	28.28±5.65 [27.53]	27.94±5.72 [27.13]
6 Months				
Weight				
Patients with both baseline and follow-up measurements, n	n=391	n=164	n=108	n=216
Weight (kg) pre-index, mean±SD [median]	83.83±19.06 [83.07]	85.36±20.71 [83.00]	85.77±20.49 [84.24]	82.95±17.27 [81.57]
Weight (kg) at 6 months post-index, mean±SD [median]	85.55±19.01 [84.14]	86.05±21.40 [84.19]	85.63±19.38 [83.47]	83.84±17.63 [81.85]
BMI				
Patients with both baseline and follow-up measurements, n	n=381	n=159	n=106	n=210
BMI (kg/m ²) pre-index, mean±SD [median]	28.46±6.41 [27.12]	29.38±10.79 [27.90]	29.31±6.39 [28.15]	27.68±5.65 [26.97]
BMI (kg/m ²) at 6 months post-index, mean±SD [median]	29.13±6.52 [28.03]	29.06±6.63 [27.91]	29.21±6.25 [28.03]	27.81±5.39 [27.20]
9 Months				
Weight				
Patients with both baseline and follow-up measurements, n	n=254	n=116	n=82	n=153
Weight (kg) pre-index, mean±SD [median]	84.28±19.86 [82.62]	85.53±20.23 [81.92]	81.99±18.14 [80.92]	84.77±18.87 [81.92]
Weight (kg) at 9 months post-index, mean±SD [median]	86.47±19.91 [84.63]	86.63±20.72 [84.04]	81.15±17.28 [79.67]	85.03±19.52 [81.81]
BMI				
Patients with both baseline and follow-up measurements, n	n=253	n=109	n=78	n=151
BMI (kg/m ²) pre-index, mean±SD [median]	28.67±6.53 [27.13]	29.68±12.34 [26.99]	27.70±5.39 [26.97]	28.52±6.52 [27.26]
BMI (kg/m ²) at 9 months post-index, mean±SD [median]	29.45±6.57 [28.24]	29.34±6.76 [27.90]	27.46±5.19 [26.65]	28.61±6.30 [27.28]
12 Months				
Weight				
Patients with both baseline and follow-up measurements, n	n=179	n=86	n=55	n=108

Weight (kg) pre-index, mean±SD [median]	84.26±20.02 [80.96]	87.08±20.41 [83.84]	82.79±20.23 [81.10]	83.94±18.40 [81.57]
Weight (kg) at 12 months post-index, mean±SD [median]	85.99±20.16 [83.01]	88.16±20.82 [85.27]	82.59±20.27 [81.92]	84.79±18.71 [81.51]
BMI				
Patients with both baseline and follow-up measurements, n	n=178	n=85	n=55	n=105
BMI (kg/m ²) pre-index, mean±SD [median]	28.35±6.40 [26.81]	30.06±13.50 [28.12]	27.60±6.07 [26.80]	28.37±6.14 [27.06]
BMI (kg/m ²) at 12 months post-index, mean±SD [median]	29.06±6.63 [27.18]	29.14±6.57 [28.16]	27.52±5.87 [26.82]	28.59±6.08 [27.03]

Abbreviations: BMI, body mass index; TAF, tenofovir alafenamide; TDF, tenofovir disoproxil fumarate.

Table S5. Unadjusted Proportions of Patients Having Any, $\geq 5\%$, or $\geq 10\%$ Weight or BMI Increases Between Pre- and Post-Index Periods

	TAF 25 mg Cohort	TAF 10 mg Cohort	TDF Cohort	Non-TAF/TDF Cohort
Weight				
3 months post-index	n=477	n=201	n=140	n=271
Any weight gain	52.0%	47.8%	47.9%	47.2%
Weight gain $\geq 5\%$	17.6%	16.4%	15.0%	14.0%
Weight gain $\geq 10\%$	6.9%	4.0%	4.3%	4.8%
6 months post-index	n=391	n=164	n=108	n=216
Any weight gain	57.0%	46.3%	45.4%	55.6%
Weight gain $\geq 5\%$	26.1%	21.3%	19.4%	19.9%
Weight gain $\geq 10\%$	12.0%	11.0%	5.6%	6.9%
9 months post-index	n=254	n=116	n=82	n=153
Any weight gain	61.4%	48.3%	43.9%	50.3%
Weight gain $\geq 5\%$	32.7%	25.0%	19.5%	17.6%
Weight gain $\geq 10\%$	16.1%	11.2%	6.1%	5.9%
12 months post-index	n=179	n=86	n=55	n=108
Any weight gain	55.3%	54.7%	47.3%	56.5%
Weight gain $\geq 5\%$	28.5%	29.1%	21.8%	15.7%
Weight gain $\geq 10\%$	15.1%	12.8%	7.3%	5.6%
BMI				
3 months post-index	n=467	n=196	n=136	n=266
Any BMI increase	51.4%	48.5%	47.8%	44.4%
BMI increase $\geq 5\%$	18.8%	17.9%	13.2%	15.0%
BMI increase $\geq 10\%$	8.4%	6.6%	4.4%	4.5%
6 months post-index	n=381	n=159	n=106	n=210
Any BMI increase	57.7%	48.4%	49.1%	51.0%
BMI increase $\geq 5\%$	25.7%	22.0%	19.8%	21.0%
BMI increase $\geq 10\%$	13.4%	11.3%	5.7%	8.1%
9 months post-index	n=253	n=109	n=78	n=151
Any BMI increase	61.3%	52.3%	41.0%	51.7%
BMI increase $\geq 5\%$	33.2%	27.5%	20.5%	20.5%
BMI increase $\geq 10\%$	17.4%	13.8%	6.4%	6.6%
12 months post-index	n=178	n=85	n=55	n=105
Any BMI increase	56.2%	54.1%	47.3%	55.2%
BMI increase $\geq 5\%$	30.9%	27.1%	25.5%	15.2%
BMI increase $\geq 10\%$	16.3%	11.8%	7.3%	5.7%

Abbreviations: BMI, body mass index; TAF, tenofovir alafenamide; TDF, tenofovir disoproxil fumarate.