

Online Supplementary Material

Real-World Assessment of Weight Change in African American Females and Hispanics with HIV-1 After Initiating Integrase Strand Transfer Inhibitors or Protease Inhibitors. *JHEOR*. 2022;9(1):1-10. [doi:10.36469/jheor.2022.30184](https://doi.org/10.36469/jheor.2022.30184)

Figure S1. Mean Weight and BMI Changes in Female African American Patients

Figure S2. Odds Ratio of Weight Gain for Female African American Patients

Figure S3. Mean Weight and BMI Changes in Hispanic Patients

Figure S4. Odds Ratio of Weight Gain for Hispanic Patients

Table S1. Demographics for Unweighted/Weighted, With TAF Subgroups and P Values (Female African American)

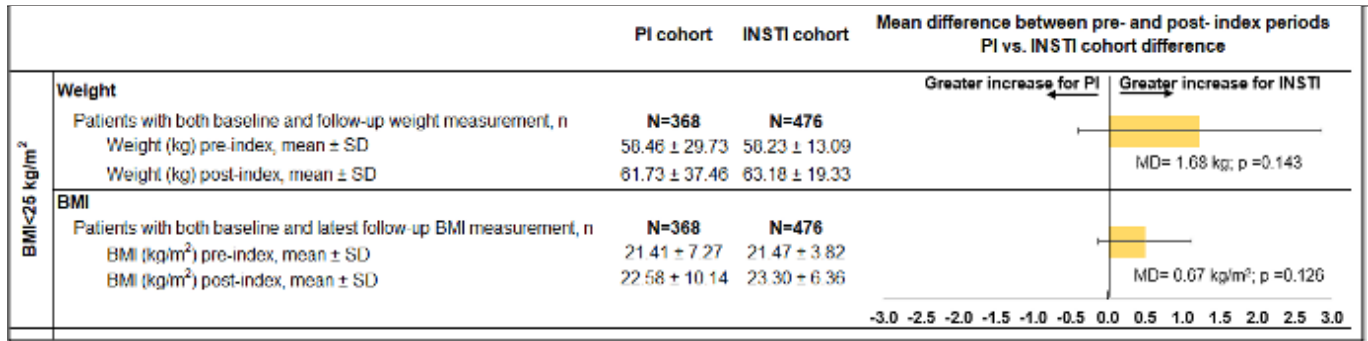
Table S2. Demographics for Unweighted/Weighted, With TAF Subgroups and P Values (Hispanic)

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



Figure S1. Mean Weight and BMI Changes in Female African American Patients

A. BMI <25



B. BMI ≥25

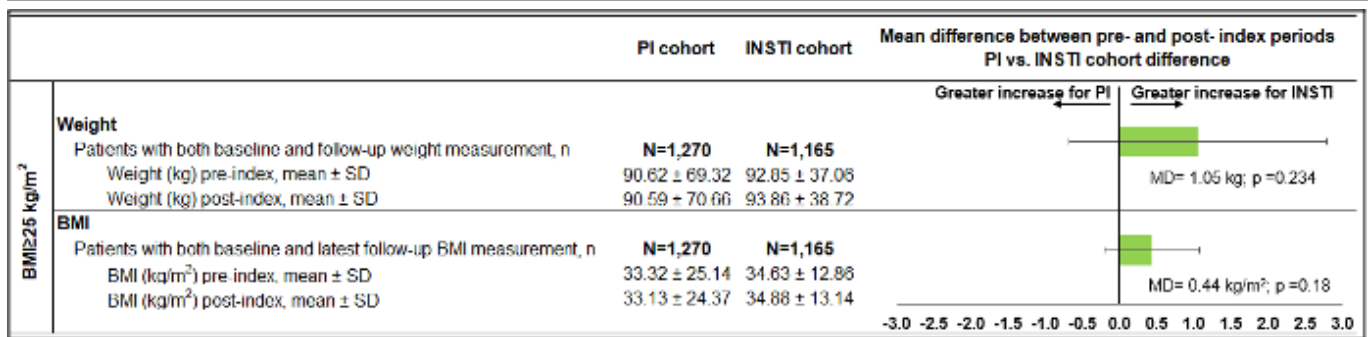
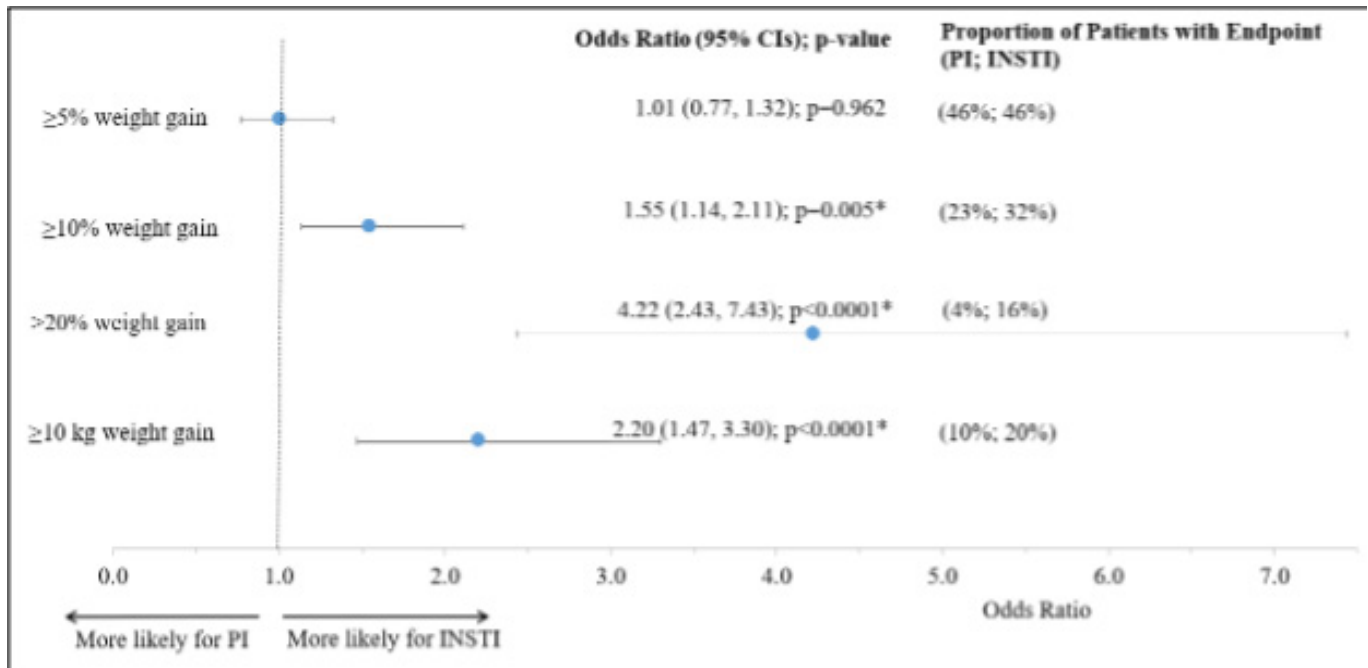


Figure S2. Odds Ratio of Weight Gain for Female African American Patients

A. BMI <25 (PI, n=368; INSTI, n=476)



B. BMI ≥25 (PI, n=1270; INSTI, n=1165)

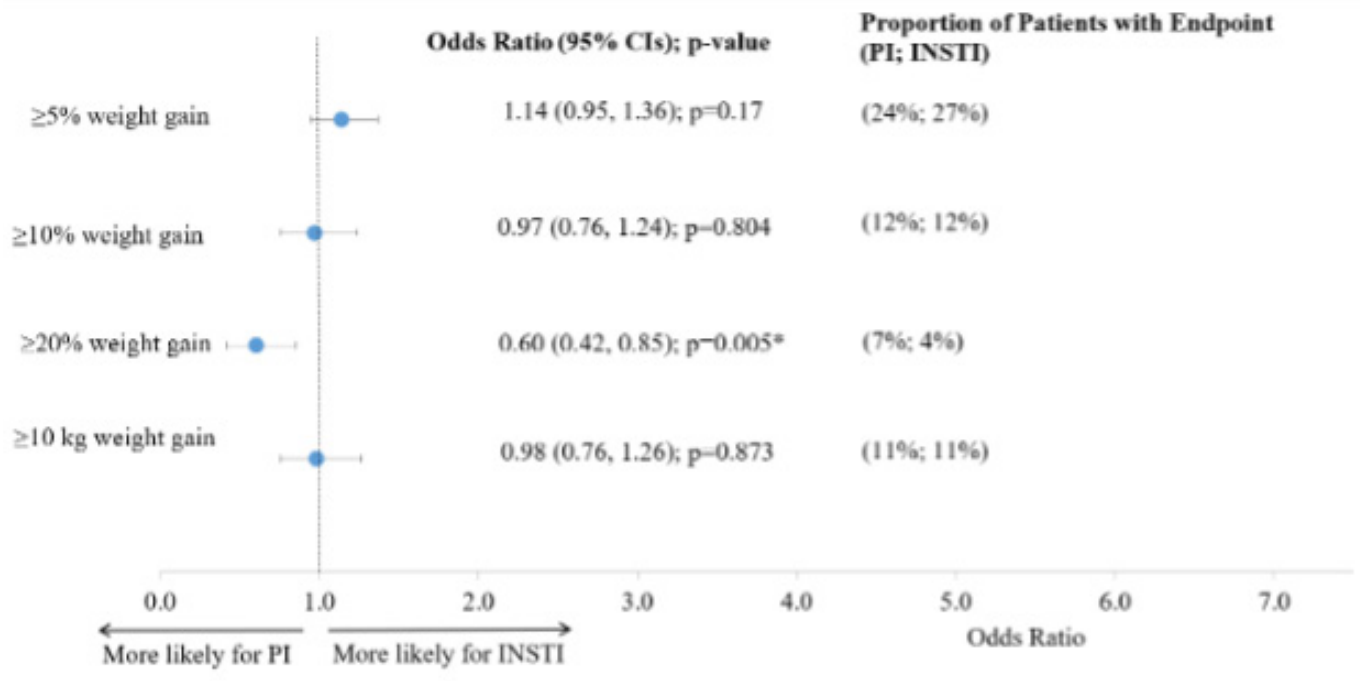


Figure S3. Mean Weight and BMI Changes in Hispanic Patients

A. BMI <25

	PI cohort	INSTI cohort	Mean difference between pre- and post-index periods PI vs. INSTI cohort difference	
			Greater increase for PI	Greater increase for INSTI
Weight				
Patients with both baseline and follow-up weight measurement, n	N=633	N=687		
Weight (kg) pre-index, mean ± SD	61.09 ± 39.98	63.94 ± 14.47		
Weight (kg) post-index, mean ± SD	65.30 ± 50.03	66.42 ± 16.24		MD= -1.73 kg; p =0.035*
BMI				
Patients with both baseline and latest follow-up BMI measurement, n	N=633	N=687		
BMI (kg/m ²) pre-index, mean ± SD	21.76 ± 9.18	22.05 ± 3.47		
BMI (kg/m ²) post-index, mean ± SD	23.13 ± 12.61	23.00 ± 4.47		MD= -0.42 kg/m ² ; p =0.158

BMI = body-mass index; INSTI = integrase strand transfer inhibitor; MD = mean difference; PI = protease inhibitor; SD = standard deviation.

* Indicates p<0.05.

B. BMI ≥25

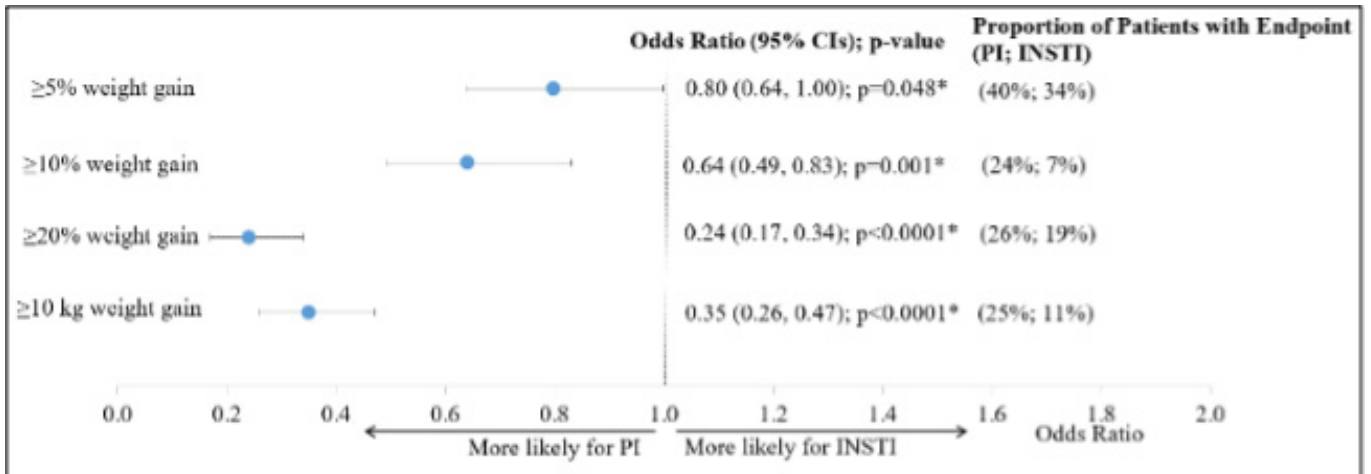
	PI cohort	INSTI cohort	Mean difference between pre- and post-index periods PI vs. INSTI cohort difference	
			Greater increase for PI	Greater increase for INSTI
Weight				
Patients with both baseline and follow-up weight measurement, n	N=1,118	N=1,110		
Weight (kg) pre-index, mean ± SD	85.61 ± 68.88	87.25 ± 25.22		
Weight (kg) post-index, mean ± SD	85.94 ± 74.63	89.21 ± 28.06		MD= 1.62 kg; p =0.005*
BMI				
Patients with both baseline and latest follow-up BMI measurement, n	N=1,118	N=1,110		
BMI (kg/m ²) pre-index, mean ± SD	30.33 ± 19.68	30.70 ± 8.21		
BMI (kg/m ²) post-index, mean ± SD	30.41 ± 22.68	31.24 ± 9.28		MD= 0.45 kg/m ² ; p =0.043*

BMI = body-mass index; INSTI = integrase strand transfer inhibitor; MD = mean difference; PI = protease inhibitor; SD = standard deviation.

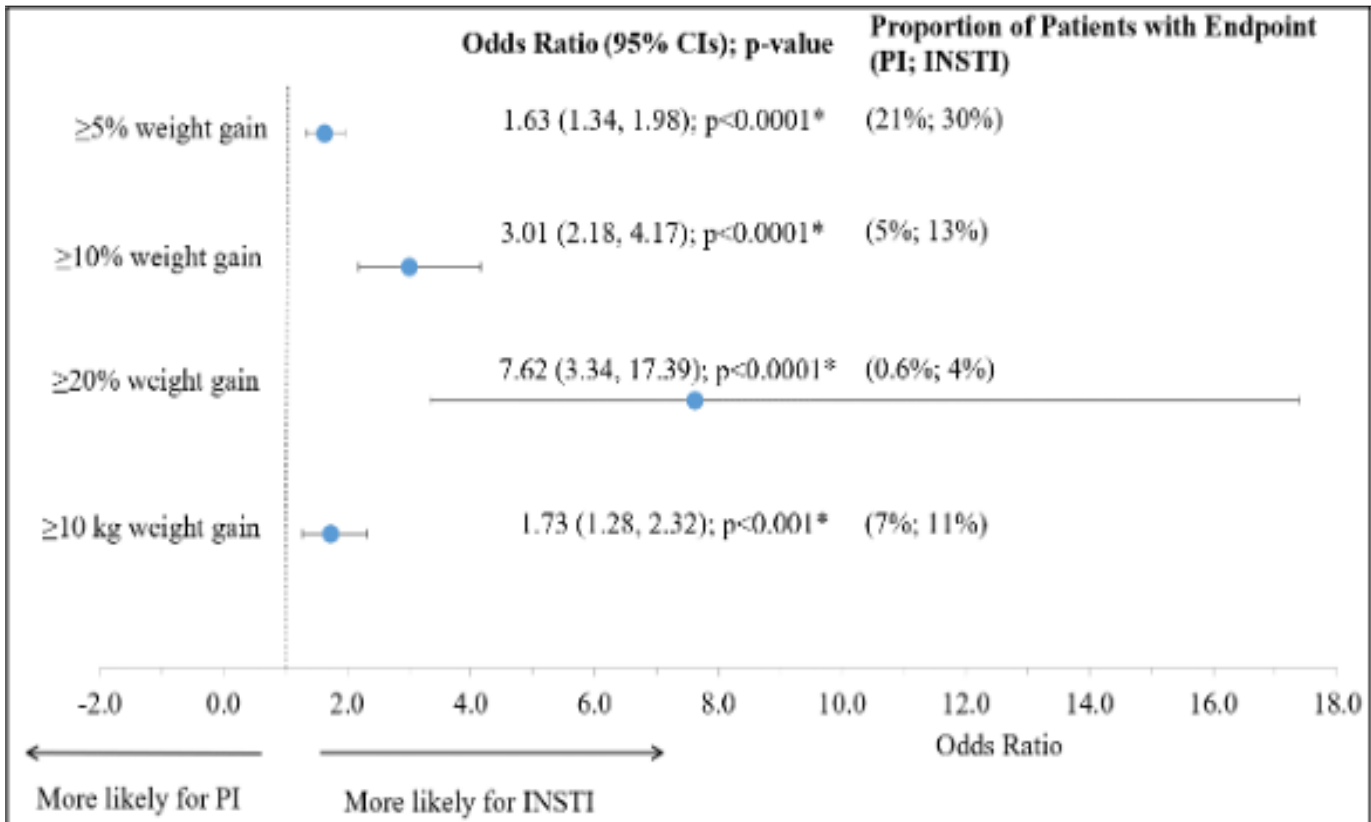
* Indicates p<0.05.

Figure S4. Odds Ratio of Weight Gain for Hispanic Patients

A. BMI <25 (PI, n=633; INSTI, n=687)



B. BMI ≥25 (PI, n=1118; INSTI, n=1110)



Abbreviations: BMI, body-mass index; CIs, confidence intervals; INSTI, integrase strand transfer inhibitor; PI, protease inhibitor.

*Indicates p<0.05.

Table S1. Baseline Demographic and Clinical Characteristics, Unweighted and Weighted, Female African Americans

Parameter ^a	Unweighted				Weighted					
	Drug Class				P Value	Drug Class				P Value
	PI w/o TAF (n=130)	PI + TAF (n=34)	INSTI w/o TAF (n=472)	INSTI + TAF (n=216)		PI w/o TAF (n=849)	PI + TAF (n=854)	INSTI w/o TAF (n=852)	INSTI + TAF (n=851)	
Age, mean (SD)	48.3 (9.3)	47.2 (12.0)	46.4 (10.9)	47.1 (11.7)	0.368	47.5 (9.1)	46.9 (11.4)	46.9 (10.8)	46.9 (11.7)	0.935
Baseline weight, mean (SD)	80.5 (22.7)	83.4 (21.1)	83.0 (26.2)	83.2 (25.1)	0.772	82.9 (23.8)	83.6 (21.4)	82.6 (25.9)	82.9 (24.9)	0.980
Baseline BMI, mean (SD)	29.8 (8.4)	30.9 (7.3)	31.2 (9.7)	30.7 (8.9)	0.537	30.7 (9.2)	30.6 (7.3)	31.1 (9.6)	30.6 (8.8)	0.937
QCI score, mean (SD)	2.4 (2.3)	2.9 (2.6)	3.3 (2.3)	3.3 (2.2)	0.001	3.2 (2.4)	3.2 (2.6)	3.2 (2.3)	3.2 (2.2)	0.996
CVD conditions, mean (SD) ^b	0.6 (0.9)	0.8 (1.2)	0.8 (1.0)	0.8 (1.0)	0.451	0.8 (1.0)	0.8 (1.1)	0.8 (1.0)	0.8 (1.0)	0.965
Individual conditions, n (%)										
Type 2 diabetes mellitus	14 (10.8)	7 (20.6)	76 (16.1)	36 (16.7)	0.359	131 (15.4)	146 (17.1)	133 (15.6)	130 (15.3)	<0.0001
Hypertension	41 (31.5)	10 (29.4)	175 (37.1)	80 (37.0)	0.552	314 (37.0)	208 (24.3)	309 (36.2)	311 (36.5)	<0.0001
Hyperlipidemia	18 (13.9)	5 (14.7)	66 (14.0)	33 (15.3)	0.972	144 (17.0)	103 (12.0)	116 (13.6)	128 (15.0)	<0.0001
AIDS	66 (50.8)	18 (52.9)	321 (68.0)	152 (70.4)	0.000	549 (64.7)	525 (61.5)	555 (65.1)	573 (67.3)	0.810
Baseline drugs, mean (SD) ^c	0.5 (1.0)	0.5 (0.9)	0.7 (1.2)	0.8 (1.3)	0.181	0.6 (1.1)	0.6 (1.0)	0.7 (1.2)	0.7 (1.2)	0.986

Abbreviations: BMI, body mass index; INSTI, integrase inhibitors; PI, protease inhibitors; QCI, Quan-Charlson Comorbidity Index; TAF, tenofovir alafenamide.

^aPropensity score was calculated based on age, baseline weight, baseline QCI score, the number of CVD risk factors (including pre-diabetes, type 2 diabetes mellitus, myocardial infarction, congestive heart failure, hypertension and hyperlipidemia) at baseline, and the number of drugs used at baseline.

^bCVD conditions included pre-diabetes, type 2 diabetes mellitus, myocardial infarction, congestive heart failure, hypertension, and hyperlipidemia.

^cIncluded the following potentially weight modifying drugs: diabetes therapies, psychiatric/neurologic therapies, hormone therapy/contraception, stimulants/appetite suppressants, and anti-hypertensives.

Table S2. Baseline Demographic and Clinical Characteristics, Unweighted and Weighted, Hispanics

Parameter ^a	Unweighted					Weighted				
	Drug Class				P Value	Drug Class				P Value
	PI w/o TAF (n=119)	PI + TAF (n=30)	INSTI w/o TAF (n=480)	INSTI + TAF (n=303)		PI w/o TAF (n=919)	PI + TAF (n=927)	INSTI w/o TAF (n=932)	INSTI + TAF (n=933)	
Age, mean (SD)	48.0 (10.4)	41.8 (11.2)	42.0 (13.0)	42.9 (13.2)	<0.0001	44.1 (10.8)	42.6 (10.9)	43.1 (13.2)	43.0 (13.3)	0.553
Female, n (%)	32 (26.9)	3 (10.0)	119 (24.8)	75 (24.8)	0.272	244 (26.5)	231 (24.9)	231 (24.8)	231 (24.7)	0.002
Race, n (%)										
African American	7 (5.9)	0 (0.0)	26 (5.4)	16 (5.3)	0.736	51 (5.5)	0 (0.0)	51 (5.4)	51 (5.5)	<0.0001
Asian	0 (0.0)	0 (0.0)	2 (0.4)	1 (0.3)	0.893	0 (0.0)	0 (0.0)	4 (0.4)	3 (0.3)	<0.0001
Caucasian	55 (46.2)	24 (80.0)	248 (51.7)	156 (51.5)	0.010	444 (48.3)	682 (73.6)	478 (51.2)	481 (51.6)	<0.0001
Other/Unknown	57 (47.9)	6 (20.0)	204 (42.5)	130 (42.9)	0.048	425 (46.2)	245 (26.4)	400 (43.0)	398 (42.7)	<0.0001
Baseline weight, mean (SD)	79.8 (21.7)	76.1 (17.8)	78.4 (18.6)	78.4 (17.8)	0.777	77.7 (20.6)	76.7 (19.7)	78.4 (18.5)	78.7 (17.8)	0.678
Baseline BMI, mean (SD)	27.5 (6.9)	27.0 (5.2)	27.3 (5.9)	27.3 (6.2)	0.982	26.9 (6.5)	27.5 (5.8)	27.4 (5.9)	27.4 (6.2)	0.705
QCI score, mean (SD)	3.4 (2.1)	2.7 (1.9)	3.0 (2.1)	3.2 (2.2)	0.166	3.0 (2.2)	3.2 (2.0)	3.1 (2.1)	3.1 (2.2)	0.852
CVD conditions, mean (SD)^b	0.6 (0.9)	0.4 (0.9)	0.5 (0.9)	0.5 (0.9)	0.646	0.5 (0.8)	0.6 (1.0)	0.5 (0.9)	0.5 (0.9)	0.162
Individual conditions, n (%)										
Type 2 diabetes mellitus	15 (12.6)	2 (6.7)	50 (10.4)	44 (14.5)	0.305	104 (11.3)	135 (14.5)	106 (11.4)	126 (13.5)	0.001
Hypertension	26 (21.9)	6 (20.0)	95 (19.8)	54 (17.8)	0.786	139 (15.1)	177 (19.2)	176 (18.9)	134 (14.4)	0.030
Hyperlipidemia	27 (22.7)	3 (10.0)	74 (15.4)	50 (16.5)	0.2008	158 (17.2)	179 (19.3)	158 (16.9)	149 (16.0)	0.001
AIDS	89 (74.8)	18 (60.0)	325 (67.7)	211 (69.6)	0.3296	602 (65.5)	620 (66.7)	646 (69.3)	637 (68.3)	0.000
Baseline drugs, mean (SD)^c	0.4 (0.7)	0.3 (0.6)	0.4 (0.9)	0.5 (0.9)	0.452	0.4 (0.7)	0.4 (0.7)	0.4 (0.9)	0.4 (0.8)	0.863

Abbreviations: BMI, body mass index; INSTI, integrase inhibitors; PI, protease inhibitor; QCI, Quan-Charlson Comorbidity Index; TAF, tenofovir alafenamide.

^a Propensity score was calculated based on age, reported gender, baseline weight, baseline QCI score and the number of drugs used at baseline.

^b CVD conditions included pre-diabetes, type 2 diabetes mellitus, myocardial infarction, congestive heart failure, hypertension, and hyperlipidemia.

^c Included the following potentially weight modifying drugs: diabetes therapies, psychiatric/neurologic therapies, hormone therapy/contraception, stimulants/appetite suppressants, and anti-hypertensives.