

Cardiovascular Risk Factors and Rates of Statin Adherence by Race						
No. Subjects	Caucasian		African-American		Hispanic / other	
	On a Statin	Total	On a Statin	Total	On a Statin	Total
	160 (33.6%)	476	121 (21.7%)	557	21 (11.1%)	190
Previous Cardiovascular Disease	42 (77.8%)*	54 (11.3%)	14 (77.8%)*	18 (3.2%)	6 (60.0%)*	10 (5.3%)
Diabetes†	26 (72.2%)*	36 (7.6%)	32 (54.2%)*	59 (10.6%)	2 (25.0%)	8 (4.2%)
LDL >190mg/dL	0 (0.00%)	1 (0.2%)	1 (20.0%)	5 (0.9%)	0 (0.00%)	0 (0.00%)
ASCVD Risk >7.5%	86 (62.3%)*	138 (29.0%)	95 (47.7%)*	199 (35.7%)	9 (39.1%)*	23 (12.1%)
Hypertension	165 (34.7%)	216 (38.8%)	216 (38.8%)	216 (38.8%)	54 (28.4%)	54 (28.4%)
Tobacco Use	78 (16.4%)	86 (15.4%)	86 (15.4%)	86 (15.4%)	34 (17.9%)	34 (17.9%)

*P-value < 0.05

†Health age between 40-75 years and LDL cholesterol >200mg/dL

Disclosures. All authors: No reported disclosures.

337. Switching from TDF to TAF: Missed Opportunities for Statin Use in HIV

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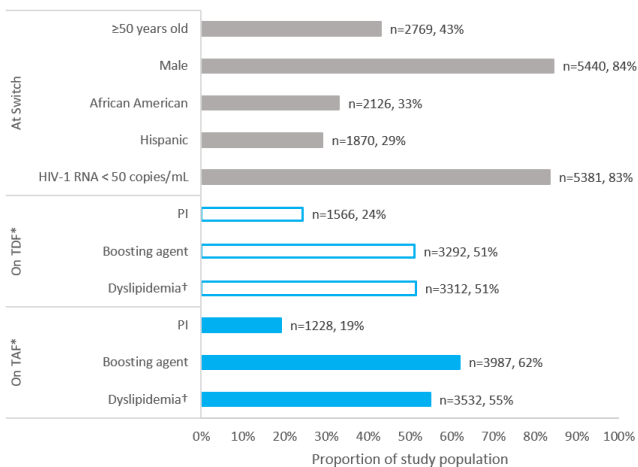
Background. People living with HIV (PLWH) have been observed to have twice the risk for atherosclerotic cardiovascular disease (ASCVD) as the general population. Increases in total and low-density lipoprotein cholesterol have been observed in PLWH switching from tenofovir disoproxil fumarate (TDF) to tenofovir alafenamide (TAF). Changes in regimens represent an opportunity for health-care providers to assess health markers and address clinical concerns. Current guidelines recommend initiating statin therapy in individuals with an elevated ASCVD risk. Failure to initiate statins in PLWH with an ASCVD $\geq 7.5\%$ at switch represents a missed opportunity for statin initiation. We aimed to assess missed opportunities for statin therapy in PLWH switching from TDF to TAF-containing antiretroviral therapy.

Methods. Adults switching from TDF to TAF with ≥ 1 lipid measure on TDF ≤ 6 months prior to switch and ≥ 1 lipid measure ≥ 7 days after switch to TAF were identified in the OPERA[®] cohort (84 clinics in 18 US states/territories). The proportion of PLWH prescribed statins pre- and post-switch was stratified by ASCVD risk (recommended threshold: ASCVD $\geq 7.5\%$). The ASCVD score was imputed using the limit value for components out of the pre-specified range.

Results. 6,451 PLWH switched from TDF to TAF (Figure 1); over 90% had ASCVD scores available pre- ($n = 5801$) and post-switch ($n = 5881$). High ASCVD risk ($\geq 7.5\%$) was more likely post-switch (34.1) than pre-switch (32.1%, $P = 0.02$; Figure 2). Of those with high ASCVD risk, only 31% and 41% were prescribed statins pre- vs. post-switch, respectively (Figure 3), representing a considerable missed opportunity for ASCVD prevention, with 59% of PLWH with an elevated risk of ASCVD not prescribed statins after switch from TDF to TAF. ASCVD scores were imputed for those outside the range of the score (e.g., patients < 40 years of age) to evaluate the entire population. Comparable results were obtained when the analysis was limited to PLWH who did not require ASCVD score imputation.

Conclusion. Despite a switch from TDF to TAF being associated with higher numbers of PLWH with elevated ASCVD risk, most did not receive a statin, representing considerable missed opportunities to reduce risk of cardiovascular disease in this at-risk population.

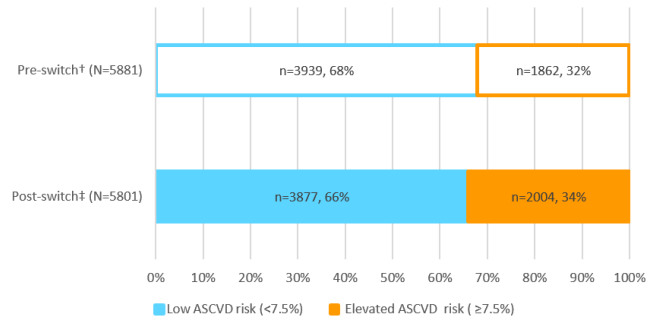
Figure 1. Demographic and clinical characteristics of PLWH switching from TDF to TAF (N=6,451)



* At the time of the lipid panel on TDF or on TAF

† NCEP ATP III dyslipidemia definition: total cholesterol ≥ 240 mg/dl, or LDL ≥ 130 mg/dl, or HDL <40 mg/dl, or triglycerides ≥ 200 mg/dl

Figure 2. Risk of ASCVD in PLWH switching from TDF to TAF with an ASCVD risk score*

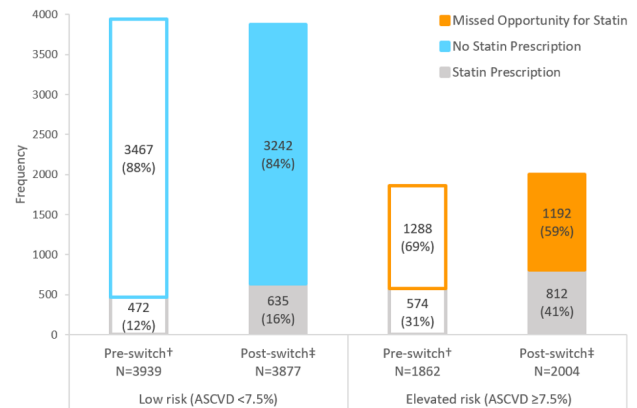


* ASCVD risk score calculated based on sex, age, race, total cholesterol, HDL, systolic blood pressure, hypertension treatment, diabetes and smoking status (ASCVD imputed using the limit value if out of range)

† Pre-switch: ASCVD calculated ≤ 6 months before the last lipid panel on TDF

‡ Post-switch: ASCVD calculated ≤ 6 months before the first lipid panel on TAF

Figure 3. Statin use by ASCVD risk* in PLWH switching from TDF to TAF (N=6,451)



* ASCVD risk score calculated based on sex, age, race, total cholesterol, HDL, systolic blood pressure, hypertension treatment, diabetes and smoking status (ASCVD imputed using the limit value if out of range)

† Pre-switch: ASCVD calculated ≤ 6 months before the last lipid panel on TDF; statin prescription at or after the last lipid panel on TDF

‡ Post-switch: ASCVD calculated ≤ 6 months before the first lipid panel on TAF; statin prescription at or after the first lipid panel on TAF

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338. Patients Living with HIV Infection Are Less Likely to Receive the Correct Intensity of Statin Therapy for Cardiovascular Disease Risk Reduction

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Background. Patients living with HIV (PLWH) at risk for atherosclerotic cardiovascular disease (ASCVD) should receive risk reduction interventions recommended in current guidelines. This includes routine ASCVD risk assessments and when eligible, statins selected and dosed to achieve appropriate low-density lipoprotein cholesterol (LDL-C) reduction. Recent studies suggest that statins are underprescribed in PLWH, but none have assessed if eligible patients receive the correct statin intensity compared with uninfected controls.

Methods. This retrospective study evaluated statin eligibility and prescribing among consecutive patients in an HIV clinic and an internal medicine clinic at an urban, academic medical center from June-September 2018. To determine statin eligibility, the 2013 American College of Cardiology/American Heart Association guideline on treating blood cholesterol to reduce ASCVD risk was used. Patients aged 40-75 that had a lipid panel obtained within the last year were included. All patients were assessed to determine eligibility for and actual treatment with appropriate statin therapy. Characteristics of patients correctly and incorrectly treated with statins were compared with chi-square testing and predictors for receiving correct statin therapy were determined with logistic multivariable regression.