



Statin Therapy in People with HIV: Implications of Recent Guideline Changes at a Ryan White Clinic in New Orleans, Louisiana

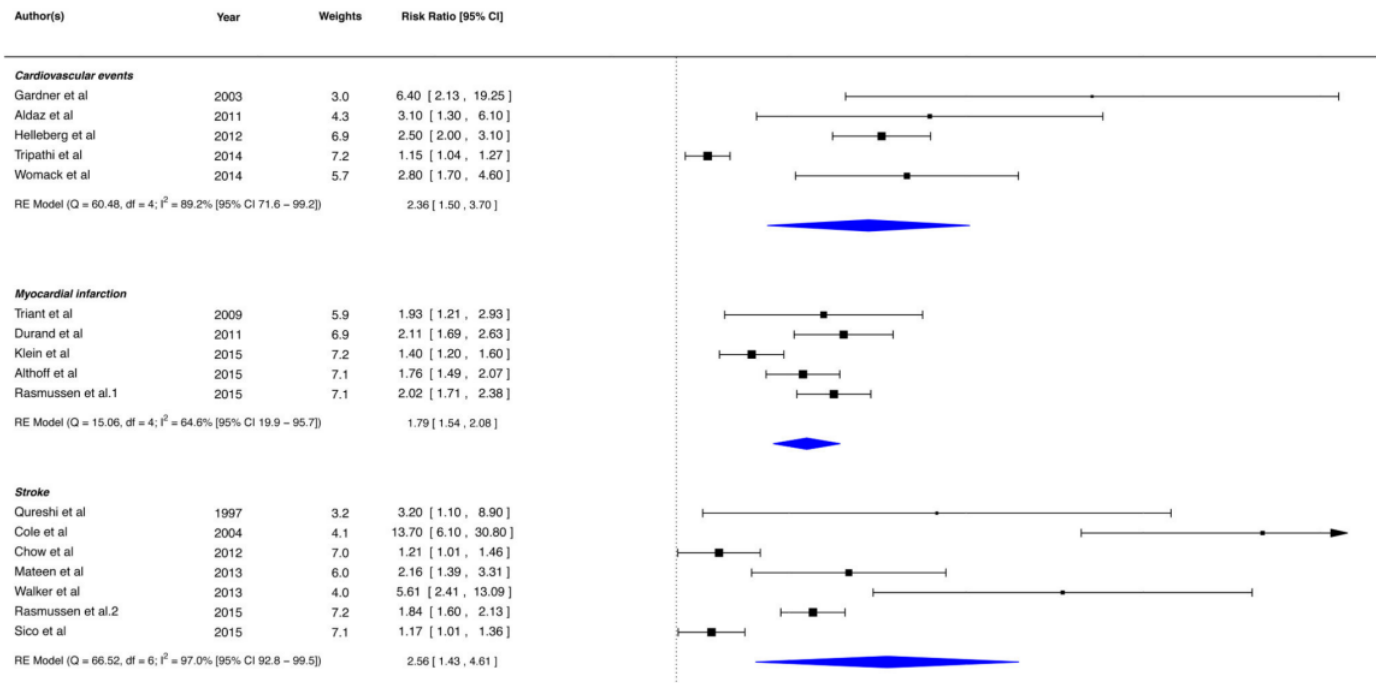
Tat Yau, MD, MPH

LSU Health New Orleans

Co-author: Lauren Richey, MD, MPH



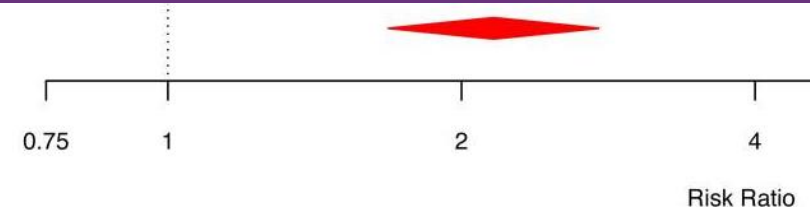
Introduction



➤ People with HIV (PWH) are **two** times likely to develop atherosclerotic cardiovascular disease (ASCVD) compared to people without HIV

- ❑ Cardiovascular events
- ❑ Myocardial Infarction
- ❑ Stroke

RE Model Studies (Q = 156.91, df = 16; I² = 94.9% [95% CI 91.4 – 98.7]) 2.16 [1.68 , 2.77]



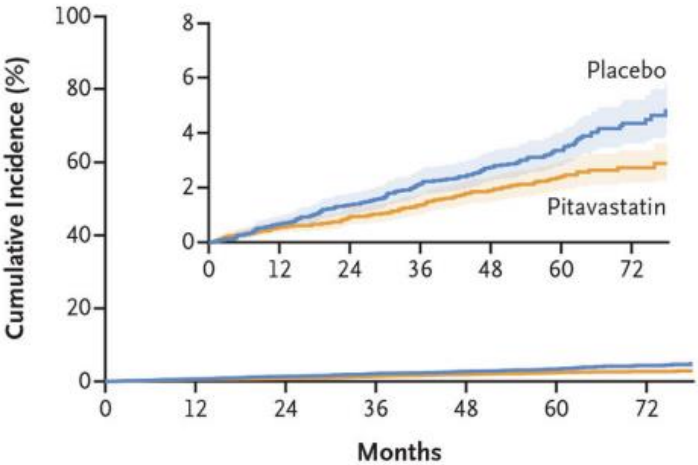
Introduction

- The REPRIEVE trial demonstrated statin use in PWH was associated with a 36% reduction in major adverse cardiovascular events over the follow-up duration.

A Estimated Treatment Effect

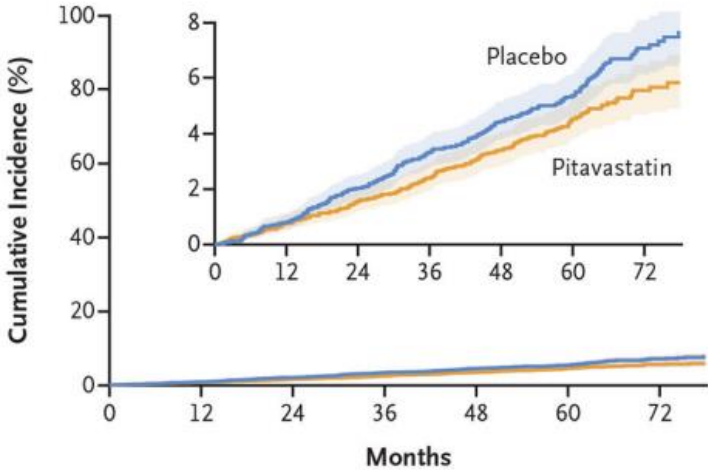
Subgroup	Pitavastatin (N=3888) <i>no./1000 person-yr</i>	Placebo (N=3881) <i>(no. of events)</i>
Primary outcome and supporting analyses		
First MACE	4.81 (89)	7.32 (136)
First MACE including vital status follow-up	4.75 (90)	7.22 (137)
First confirmed MACE	3.83 (71)	5.92 (110)
First MACE (as-treated analysis)	4.44 (77)	6.25 (107)
First MACE (per-protocol analysis)	4.54 (80)	6.77 (120)
Secondary outcomes and supporting analyses		
First MACE or death	9.18 (170)	11.63 (216)
First MACE or death including vital status follow-up	9.13 (173)	11.70 (222)
Death from any cause	6.17 (116)	6.83 (129)
Individual components of MACE		
First cardiac ischemia or myocardial infarction	1.40 (26)	2.51 (47)
First cerebrovascular event (stroke or TIA)	1.56 (29)	2.36 (44)
First peripheral arterial ischemia	0.11 (2)	0.16 (3)
Death from cardiovascular causes	0.64 (12)	0.85 (16)
Death from cardiovascular or undetermined causes	1.60 (30)	2.24 (42)
First cardiac catheterization or revascularization	0.97 (18)	1.66 (31)
First carotid or cerebrovascular revascularization	0.00 (0)	0.00 (0)
First peripheral arterial revascularization	0.00 (0)	0.32 (6)

B First MACE



Cumulative Incidence of Event (%)								
Placebo	0.00	0.66	1.38	2.14	2.74	3.36	4.36	
Pitavastatin	0.00	0.56	0.95	1.35	1.89	2.41	2.73	
No. at Risk								
Placebo	3881	3693	3506	3356	2997	2182	959	
Pitavastatin	3888	3647	3475	3364	2997	1947	1052	

C First MACE or Death



Cumulative Incidence of Event (%)							
Placebo	0.00	0.80	2.03	3.34	4.44	5.35	7.06
Pitavastatin	0.00	0.77	1.58	2.39	3.40	4.54	5.54
No. at Risk							
Placebo	3881	3693	3506	3356	2997	1975	919
Pitavastatin	3888	3647	3475	3364	2998	1948	1027

Introduction

- The HHS Panel has updated its recommendations for the use of statin therapy as a primary prevention against atherosclerotic cardiovascular disease (ASCVD) in people with HIV (PWH).
- Initiating at least **moderate-intensity statin** therapy (AI) is recommended for **PWH aged 40 to 75** with ASCVD risk score **5% to <20%**



Panel on Antiretroviral Guidelines for Adults and Adolescents. 2024.

Statin Therapy in People With HIV

Updated: September 12, 2024

Reviewed: September 12, 2024

Recommendations for the Use of Statin Therapy as Primary Prevention of Atherosclerotic Cardiovascular Disease in People With HIV

Statement released: February 27, 2024



Introduction



Most patients at the **HIV Outpatient Program** (HOP) at the **University Medical Center New Orleans** (UMCNO) could benefit from initiating statin therapy based on the updated guidelines.



Description

- This study aimed to assess compliance with the updated standard of care recommendations for statin therapy.
- PWH aged 40 to 75 who received care at HOP in the years 2023 and 2024 were evaluated.



Lessons Learned

- There was a statistically significant increase in statin use among PWH aged 40 to 75
 - ❑ 52% in 2023
 - Increased to 56% in 2024 ($p < 0.01$)
 - ❑ Significant increase among PWH aged 40-54 ($p < 0.01$) and 55-64 ($p < 0.01$)

Age	2023		2024		Total
	Statin use	No statin	Statin use	No statin	
40-54	151 (33%)	307 (67%)	173* (38%)	285 (62%)	458
55-64	268 (64%)	148 (36%)	287* (69%)	129 (31%)	416
65-75	131 (72%)	50 (28%)	128 (71%)	53 (29%)	181
40-75	550 (52%)	505 (48%)	588* (56%)	467 (44%)	1055

Patients with HIV aged 40-75	2023				2024			
	Statin Use		Without Statin		Statin Use		Without Statin	
Sex								
Female	146	(37%)	250	(63%)	163	(41%)	234	(59%)
Transgender female	2	(25%)	6	(75%)	2	(25%)	6	(75%)
Male	328	(41%)	481	(59%)	397*	(51%)	379	(49%)
Ethnicity								
Black	364	(40%)	541	(60%)	419*	(48%)	457	(52%)
White	91	(39%)	143	(61%)	111*	(49%)	116	(51%)
Others	21	(28%)	54	(72%)	32	(42%)	45	(58%)
ASCVD Score								
<5%	40	(20%)	157	(80%)	47	(23%)	157	(77%)
5-20%	161	(40%)	243	(60%)	227*	(55%)	185	(45%)
>20%	68	(62%)	41	(38%)	83	(73%)	31	(27%)
No data	207	(41%)	297	(59%)	205	(46%)	245	(54%)
Past medical history								
Hypertension	389	(49%)	400	(51%)	446	(58%)	329	(42%)
Hyperlipidemia	407	(64%)	231	(36%)	469	(68%)	216	(32%)
Diabetes mellitus	169	(61%)	106	(39%)	209	(67%)	102	(33%)
Smoking history								
Current smoker	148	(37%)	247	(63%)	182*	(46%)	211	(54%)
Former smoker	152	(45%)	187	(55%)	157	(49%)	166	(51%)
Nonsmoker	175	(37%)	292	(63%)	222*	(49%)	230	(51%)

- Furthermore, there was a significant increase among subgroups:
 - Male sex at birth (10%)
 - Black (8%)
 - White (10%)

Recommendations

- The study demonstrated a statistical improvement in statin use indicating awareness of the updated guidelines on statin utilization among the medical providers at HOP.
- A clinical quality improvement project will be implemented to improve statin use among PWH.



Take Home

- ✓ While people with HIV are more likely to suffer cardiovascular disease than people without HIV, evidence-based guideline recommends statin use in people with HIV who are at risk.
- ✓ We found a significant increase in statin utilization after guideline recommendation.
- ✓ Additional effort is warranted to promote comprehensive care for people with HIV:
 - ❑ Raise awareness of statin use among providers and clients
 - ❑ Establish a standard operating procedure to recommend statin therapy for those who are at risk
 - ❑ Monitor clinical response and outcomes



Endymion Parade



Thank you



Tat Yau, MD, MPH
Assistant Clinical Professor
LSU Infectious Diseases

tyau@lsuhsc.edu
2021 Perdido St,
New Orleans, LA 70112
504-568-5031

