

Are patients living with HIV infection at risk for not receiving statin medications for cardiovascular disease risk reduction?

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Background

- Patients living with HIV infection (PLWH) have an increased risk of atherosclerotic cardiovascular disease (ASCVD), but are infrequently prescribed guideline-recommended statin medications¹⁻⁵
- PLWH should receive the same ASCVD prevention strategies as the general population including statin therapy

Objective

- To determine the prevalence of appropriate statin prescribing for ASCVD risk reduction in PLWH

Methods

- Observational, single-center, retrospective chart review of 141 consecutive patients attending the Jefferson Infectious Disease Associates outpatient HIV clinic
- Patients were included if they were between the ages of 40-79 years, had a recent cholesterol panel resulting in a total cholesterol of ≥ 130 mg/dL, a LDL-C ≥ 30 mg/dL, and a HDL-C ≥ 20 mg/dL, and had a BP $\geq 90/60$ mmHg
- The 2013 American College of Cardiology/American Heart Association Guideline on the Treatment of Blood Cholesterol to Reduce ASCVD Risk in Adults was used to determine statin eligibility for each participant⁵
- Patients receiving a recommended statin encompassed the appropriate statin therapy group

References

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Results

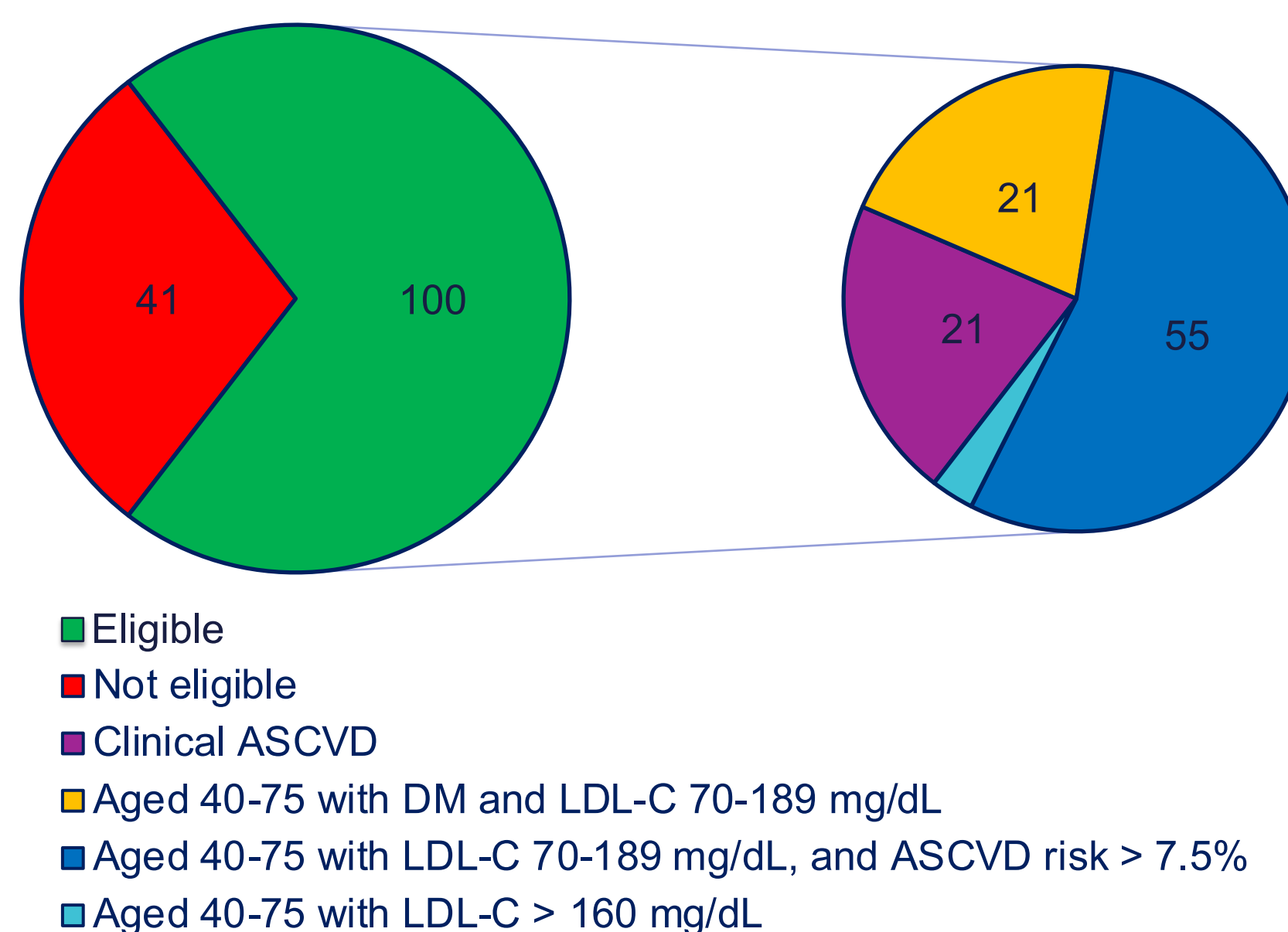
Table 1. Patient characteristics

Characteristic	Total (n = 141)
Mean age - years	55.9
Male sex - %	71.6
Race - %	
African American	68.1
Caucasian	22.7
Mean duration of HIV infection – years	15.5
Virally suppressed - %	87.2
Single tablet antiretroviral regimen - %	51.1
Polypharmacy - %	66.7
Has a primary care physician - %	94.3
Visit within last year - %	72.3
With insurance - %	95.7
Governmental	59.6
Private	36.1
Mean ASCVD risk score in those without clinical disease - %	29.3
Statin eligible - n	100
Receiving correct statin and dose - n	32

Table 2. Prescribing in statin-eligible patients (n = 100)

Subgroup	Appropriate Prescribing no. (%)
ASCVD Benefit Group	
Group 1	17/21 (81.0)
Group 2	0/3 (0)
Group 3	13/21 (61.9)
Group 4	21/55 (38.2)
Race	
African American	30/70 (42.9)
Caucasian	13/21 (61.9)
Sex	
Male	39/75 (52.0)
Female	11/24 (45.8)
Polypharmacy	47/77 (61.0)
PCP visit within last year	
Yes	43/75 (57.3)
No	7/33 (31.8)
Single tablet regimen	
Yes	22/46 (47.8)
No	29/54 (53.7)

Figure 1. Proportion of patients statin eligible and indications for statin use



Conclusions

- PLWH are prone to inadequate ASCVD risk reduction through inappropriate statin prescribing
- Despite guideline recommendations, the majority of eligible patients were not receiving appropriate statin medications
- The majority of statin-eligible patients were in benefit group 4, yet received the lowest proportion of appropriate statins
- Race and maintaining correspondence with one's PCP may influence appropriate statin prescribing
- Additional analyses will be performed to identify factors associated with statin prescribing in PLWH

Limitations

- Single-centered study design could limit the external validity
- Patients' medical records may be incomplete and inaccurate
- Lack of control group to compare prescribing habits