

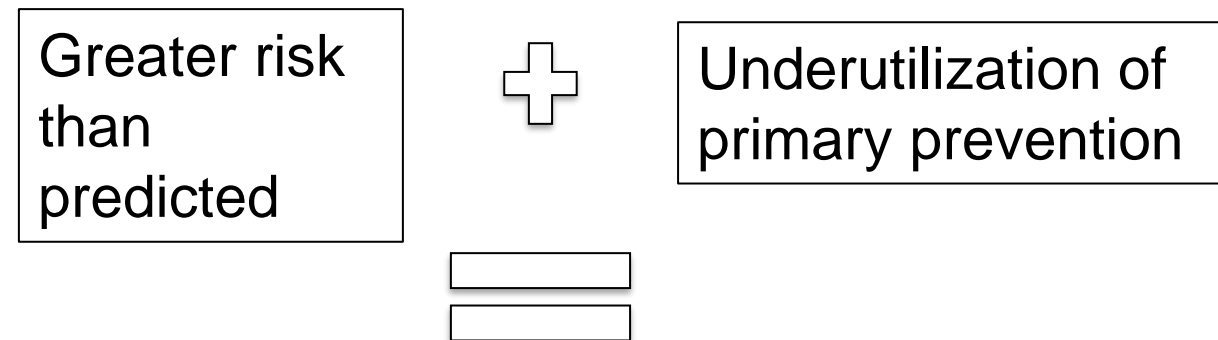
Statin Utilization as a Function of Calculated ASCVD Risk in HCV-infected Patients

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Introduction

- HCV infection is an independent risk factor for coronary artery disease (CAD)¹
- Statins are underutilized in patients with HCV²
 - Largely due to concerns for increased side effects
 - Concerns are not supported by recent literature^{3,4}
- Chew et al found that the 2013 ACC/AHA Pooled Cohort Equation (PCE) underestimates ASCVD risk in subjects infected with HCV whose calculated risk is $\geq 7.5\%$ ²
- Does utilization improve in those with risk $\geq 7.5\%$?**
- Why does that question matter?



- High risk for poor outcomes due to suboptimal care
- Determine utilization in these high-risk patients
 - Target future research and provider education to improve utilization in these patients

Methods

- Single-center retrospective analysis 2019-2021 of individuals with HCV antibody or RNA
- Excluded individuals with HBV or HIV coinfections
- Excluded those with history of ASCVD – only assessing primary prevention
- ASCVD risk calculated using 2013 PCE
- Assessed for presence of a statin on patient's medication list at any point 2019-2021
- Subjects grouped based on calculated ASCVD risk and groups compared to each other
 - ANOVA used to compare means and chi-square used to compare proportions

Results

Variable	ASCVD risk < 5% (n=237)	ASCVD risk 5-7.4% (n=131)	ASCVD risk 7.5-9.9% (n=98)	ASCVD risk 10-19.9% (n=361)	ASCVD risk $\geq 20\%$ (n=250)	P-value
Age (years), mean (SD)	49.5 (6.3)	54.5 (6.0)	56.1 (6.4)	59.6 (6.1)	61.7 (6.0)	< 0.001
Female sex	65.0%	42.0%	38.8%	30.5%	17.6%	< 0.001
Black race	24.1%	25.2%	44.9%	54.8%	73.6%	< 0.001
Total cholesterol (mg/dL), mean (SD)	166.7 (35.8)	169.4 (42.5)	172.9 (36.3)	169.8 (36.7)	168.0 (42.9)	0.704
High-density lipoprotein cholesterol (mg/dL), mean (SD)	59.1 (20.5)	56.7 (20.2)	55.9 (20.0)	52.3 (18.0)	50.6 (19.6)	< 0.001
Low-density lipoprotein cholesterol (mg/dL), mean (SD)	73.1 (39.6)	73.6 (40.8)	83.4 (42.4)	77.6 (41.8)	75.9 (39.8)	0.266
Diabetes	9.7%	15.3%	27.6%	25.5%	65.2%	< 0.001
Systolic blood pressure (mmHg), mean (SD)	122.1 (14.4)	125.6 (17.9)	126.3 (17.7)	135.4 (17.1)	145.7 (18.8)	< 0.001
On anti-hypertensive therapy	36.3%	48.9%	51.0%	62.9%	85.2%	< .0001
Body mass index (kg/m ²), mean (SD)	28.8 (7.2)	29.4 (7.0)	29.5 (7.1)	28.6 (6.7)	29.2 (6.5)	0.652
Current smoking	43.5%	59.5%	54.1%	59.8%	68.4%	< 0.001
FIB-4 > 3.5	13.7%	14.2%	9.6%	14.7%	9.3%	0.286
Diagnosis of cirrhosis	13.5%	13.7%	19.4%	16.1%	15.6%	0.689
Statin therapy	8.0%	13.7%	23.5%	31.0%	53.6%	< 0.001

- 269/709 (37.9%) of subjects with 10-year risk $\geq 7.5\%$ were treated with a statin
- 37/368 (10.1%) of subjects with risk < 7.5% were treated with a statin
- Utilization increased with increased ASCVD risk

- 1,077 total subjects included in analysis
- 709/1077 (65.8%) had 10-year ASCVD risk $\geq 7.5\%$

Discussion

- Utilization does improve as one would expect as ASCVD risk increases
- However, utilization remains relatively low even at very high risk
 - Only ~50% of individuals with risk $\geq 20\%$
 - Potential for considerable clinical improvement
- Further research needed to determine why statins are underutilized
- Is it only concern for increased side effects?
 - Certain patient characteristics that lead to underutilization?
- Prospective research needed to demonstrate CV benefit of statins in this specific population

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