Applying the New ACC/AHA Cholesterol Guidelines in Practice

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Disclosure

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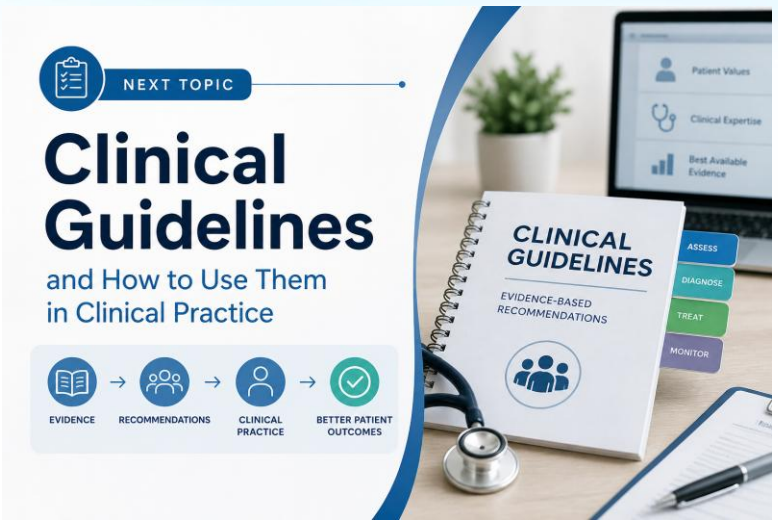
Learning Objectives

1. Understand guideline background and use in routine clinical practice.
2. Integrating subclinical atherosclerosis and risk-enhancing factors into practice.
3. Applying risk-based cholesterol targets to patients.

Objective 1



2026 ACC/AHA/AACVPR/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA Guideline on the Management of Dyslipidemia: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines

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Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423

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What Are These Guidelines?

- Guidelines are reference documents aimed at practicing clinicians to translate the best evidence into practice
- Joint effort from multiple professional societies
- 123 pages of information—tables, figures, algorithms, etc…
- Recommendations are graded, as is the evidence that supports them

Otto CM, et al. https://doi.org/10.1161/CIR.0000000000001383
Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423

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Practical Applications

- Time is limited in clinic:
  - Calculating PREVENT takes time
  - Referencing multiple sources
  - Shared decision-making conversation
  - Risk discussion
- Can feel overwhelming
  - 68 tables, 18 figures

Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423

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Make It Bite Sized

- Each visit as an opportunity
  - Lab testing and risk assessment
- Make risk personalization as useful as possible

Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423

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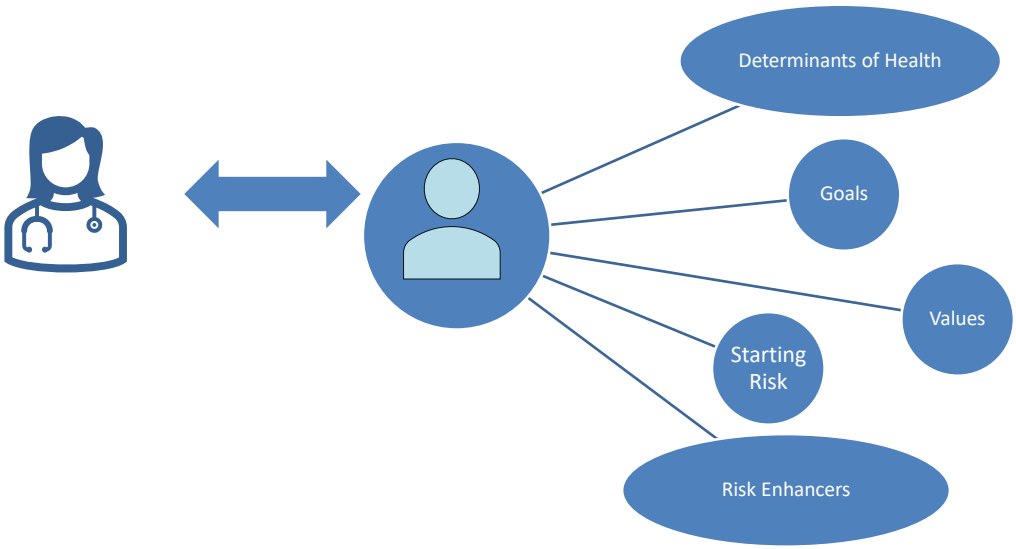
Shared Decision-Making



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Explaining Risk Is Confusing

Absolute Terms

- The risk of X is HIGH
- The risk of Y is LOW
- 1 in 100, every 6 people who has this done, etc…

Relative terms

- Compared to others your age, sex and race, your risk is Z.

Time

- In 5 years?, 10 years?, 30 years?

Although the benefit of risk reduction is related to absolute risk, people also think about relative risk.

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Cumulative Exposure

Pack Years

- How much for how long?

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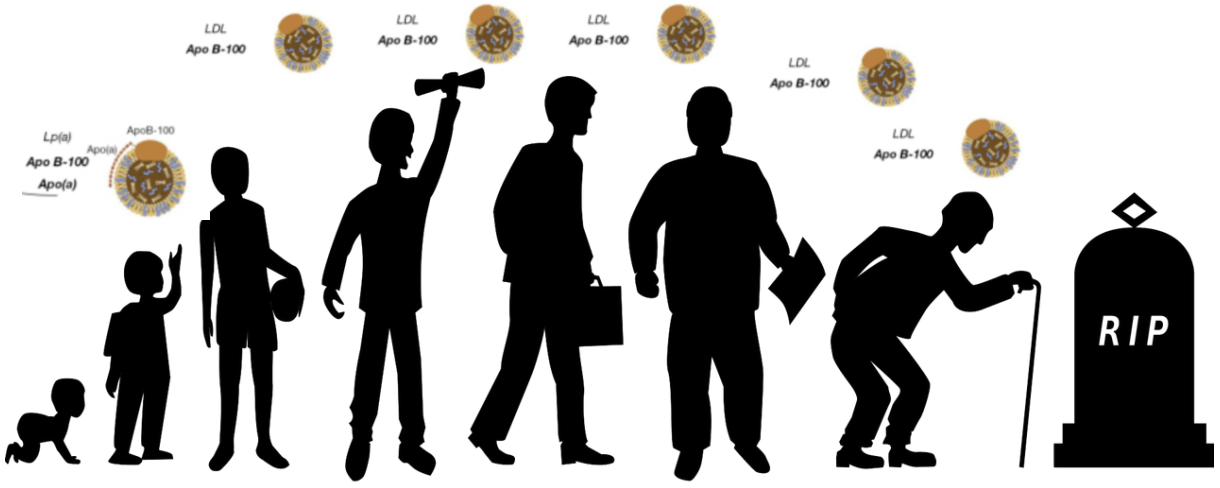
Why Not Cholesterol?



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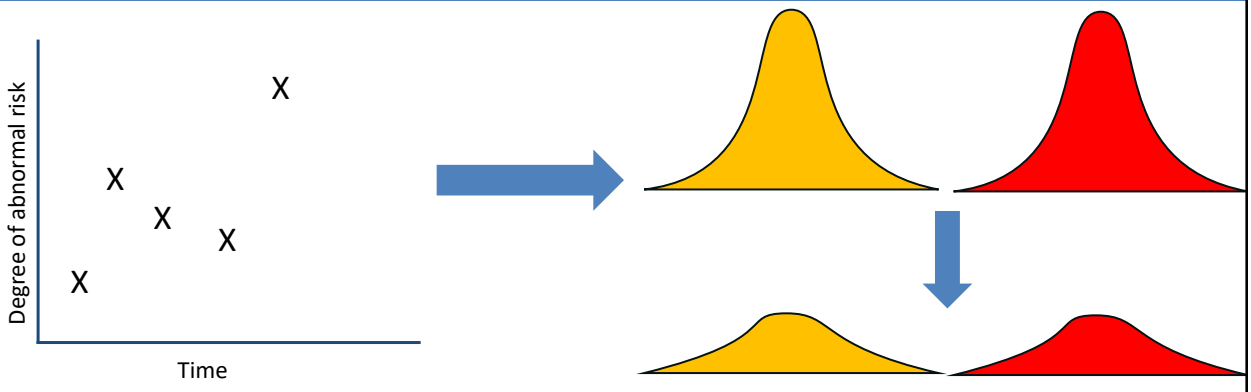
Why Not Cholesterol?



Current Future

Goal—how do we increase time in optimal range

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Takeaway #1

- Test Earlier
  - Lipid panel at least once for those 9-11
  - Risk personalization labs
    - Lp(a) in all
    - apoB in some
- Treat Earlier
  - Adherence to Life's Essential 8
  - Medications for those 30+ with increased risk
  - Intensify if not at goal

Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423

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ARS Question 1

Which of the Following Is *Not* True?

A. Consider obtaining first lipid panel as early as 9 years old
B. Test Lp(a) in all individuals
C. Test apoB in all individuals
D. Consider medications as an adjunct to lifestyle as early as 30 years old

Checking ApoB

2a: Reasonable to guide plan for those with ASCVD, DM, elevated TGLs on lipid-lowering therapy

2b: for risk personalization and guiding initiating lipid-lowering therapy

Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423

Use ApoB to Assess Residual Lipid-Related Risk

ApoB measures all atherogenic particles and is more accurate compared to LDL-cholesterol

Screening with Apolipoprotein B

All atherogenic lipoproteins have a single apoB100 protein. ApoB is not affected by fasting

In adults <u>on lipid-lowering therapy</u>, particularly those with ASCVD, type 2 DM, and/or elevated TG, measurement of apoB <u>is reasonable</u> to guide decisions regarding further therapeutic intensification once LDL-C and/or non-HDL-C goals are achieved (2a)

In adults <u>not on lipid lowering therapy</u>, measurement of apoB <u>may be reasonable</u> to enhance ASCVD risk assessment, guide initiation of lipid lowering therapy, and characterize inherited lipid disorders (2b)

Particularly for secondary prevention, metabolic syndrome, diabetes, elevated triglyceride > 200 mg/dL

Blumenthal RS, et al. J Am Coll Cardiol. 2026;Epub ahead of print.
Blumenthal, R.S., Morris, P.B., et al. 2026 ACC/AHA Guideline on the Management of Dyslipidemia. *Circulation*.

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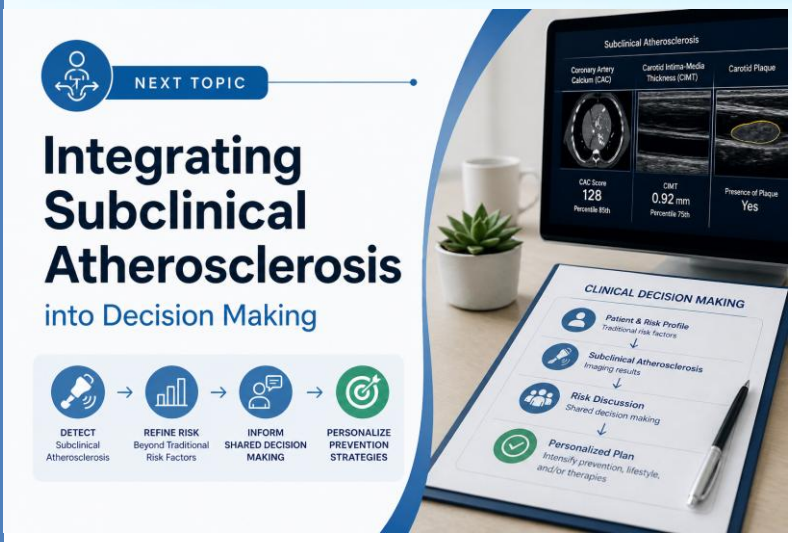
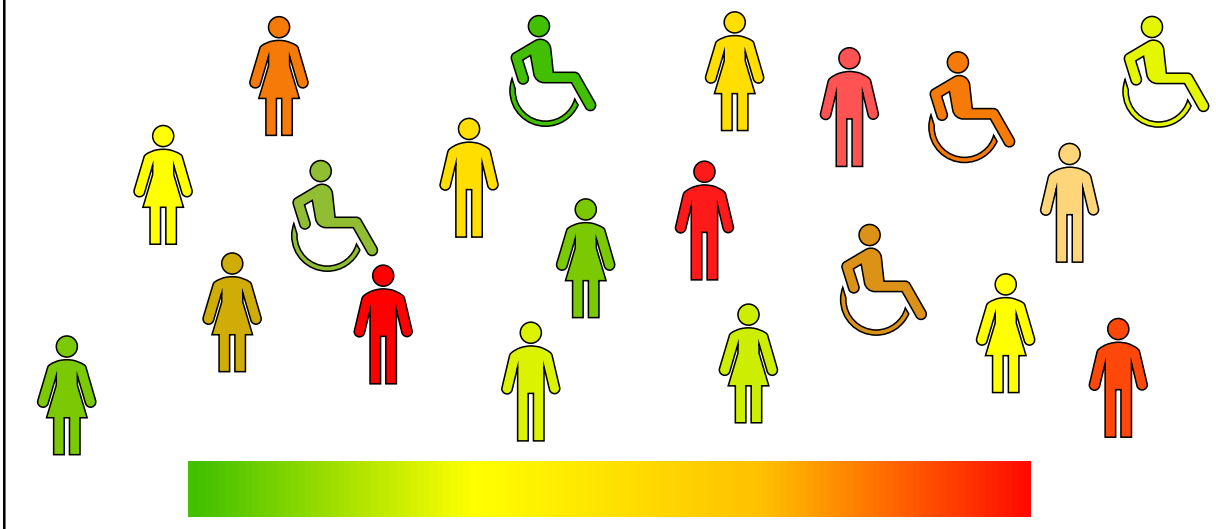
Objective 2



Population Level Risk



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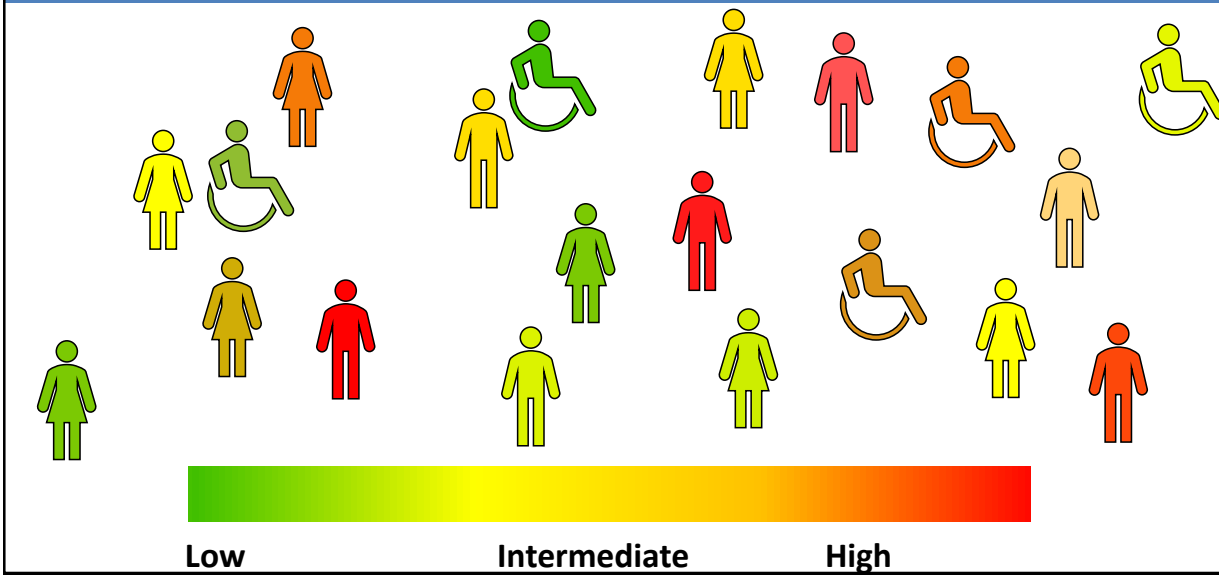
Population Level Risk



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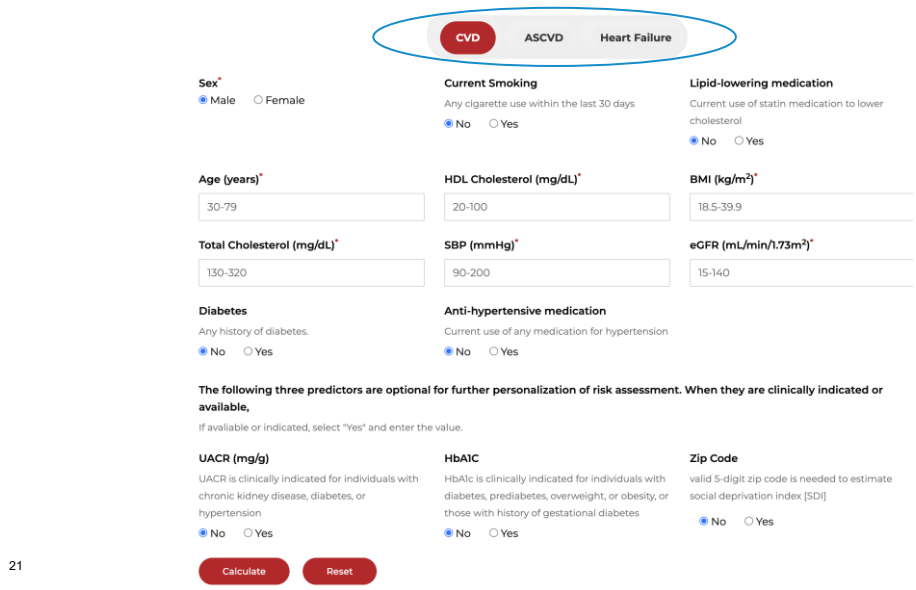
2023 PREVENT

For adults 30-79, 10-year and 30-year risk



https://professional.heart.org/en/guidelines-and-statements/prevent-calculator

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Side-by-Side Comparison

	2013 PCE	2023 PREVENT
Age	X	X
Sex	X	X
Race	X	—
Blood Pressure	X	X
Tobacco Use	X	X
Cholesterol	X	X
Diabetes	X	X
Hypertension Tx	X	X
Lipid Tx	—	X
BMI	—	X
eGFR	—	X
Optional		
UACR	—	X
Hgb A1C	—	X
Zip Code	—	X

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Risk/Treatment Paradigm

Patient Risk

Low Intermediate High

Treatment Intensity



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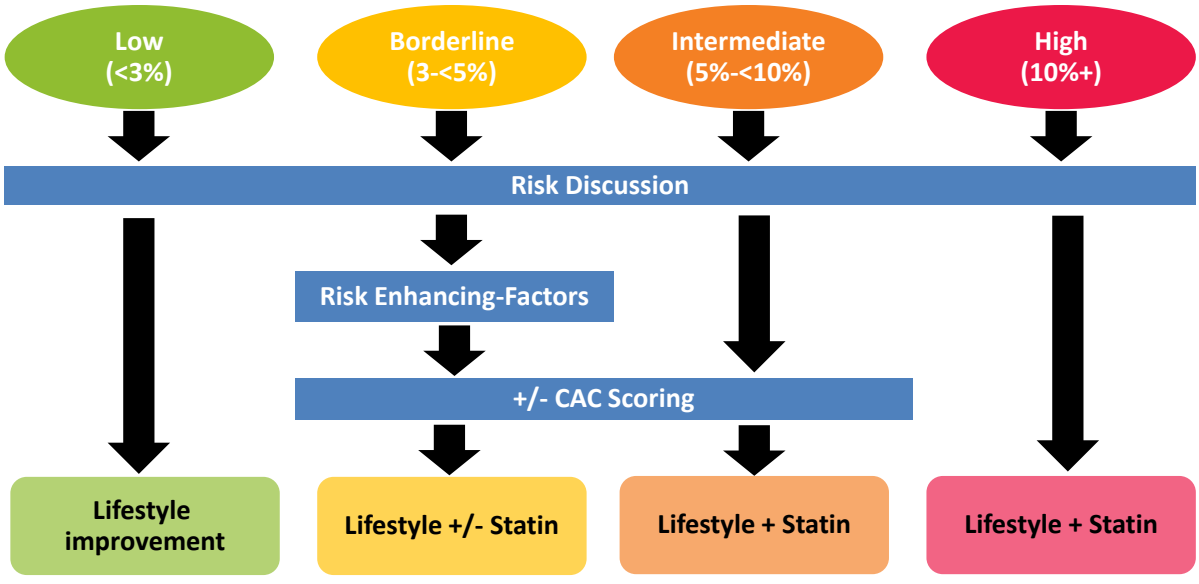
2026 Risk Paradigm



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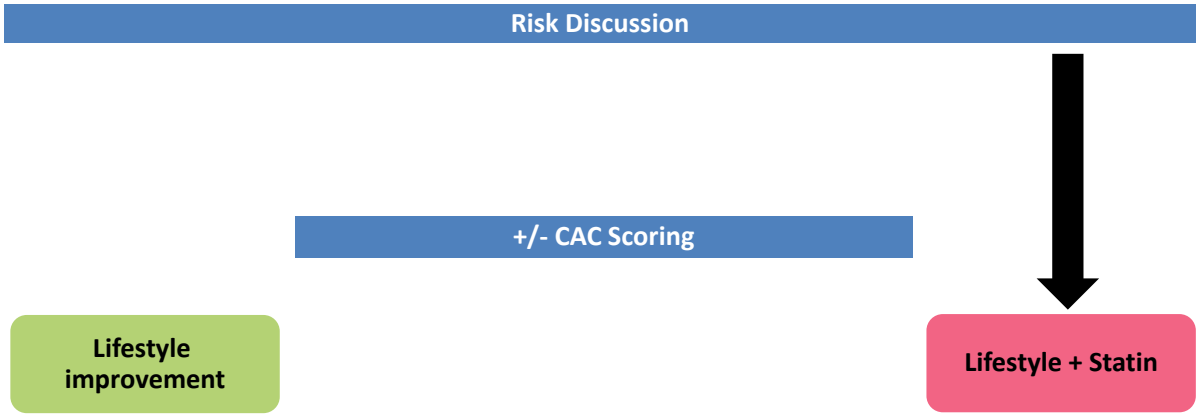
What If We Flipped the Script?



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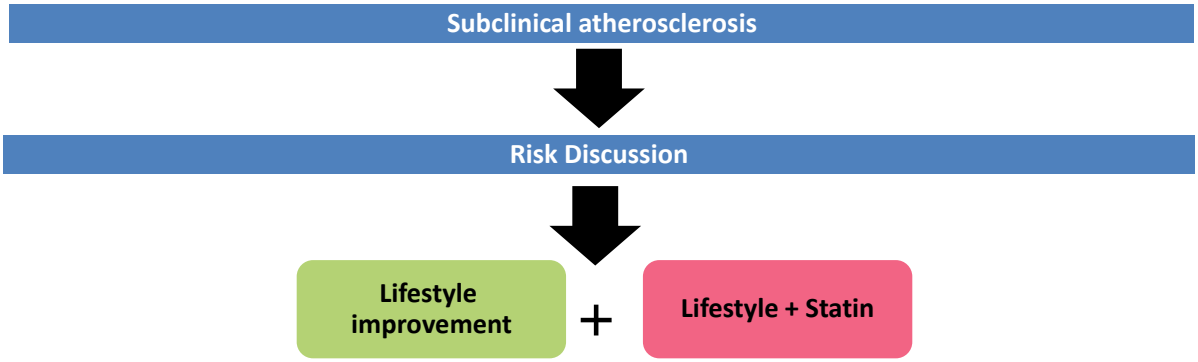

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In Clinic

- First, check for subclinical atherosclerosis
  - Have they had a CAC test done?
  - Have they had a non-gated CT with visual evidence or artificial intelligence evidence of CAC?
  - Other commented atherosclerosis?

- **NB—this does not mean start with CAC testing or order CAC scans on everybody**

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Incidental Atherosclerosis

Comparing two cohorts

	Stanford iCAC	CAC Consortium
Age	**60.5 ± 16.2**	**54 ± 11**
Sex, female	**51%**	**33%**
Race/Ethnicity		
White	**58%**	**89%**
Black	**3.5%**	**2%**
Hispanic	**13%**	**3%**

Peng AW, Dudum R, et al. J AM Coll Cardiol. 2023;81(12):1192-1202.
Blaha MJ, et al. J Cardiovasc Comput Tomogr. 2016 Nov 11;11(1):54–61

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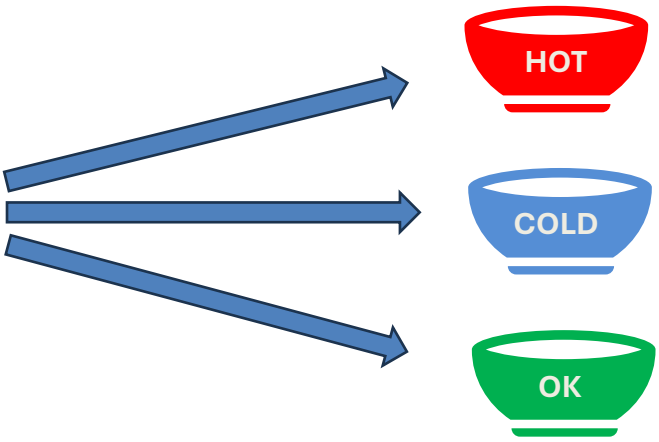
Burden of CAC



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Burden of CAC

	CAC Scan	Incidental CAC	LDL-C Goal
¡¡HOT!!	1000+		<55mg/dL
HOT	300+ to 999	Mod-Sev	<70mg/dL <70mg/dL
COLD	100+ to 299	Mild	<70mg/dL <100mg/dL
OK	1 to 99	Mild	<100mg/dL

Adapted from Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423

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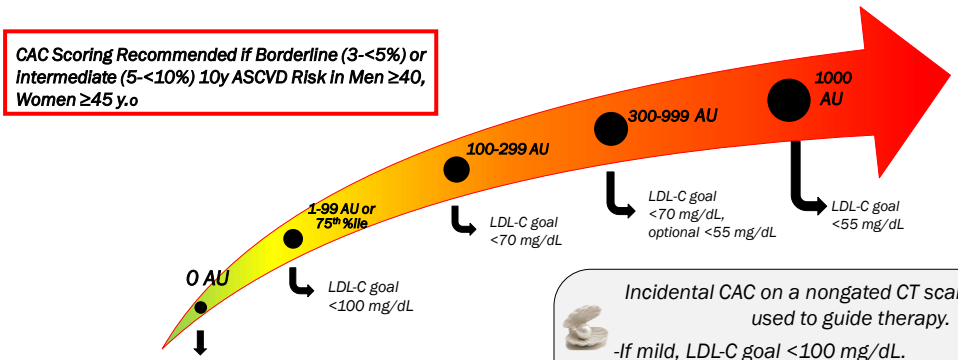
ARS Question 2

Which One of the Following Subclinical Atherosclerosis Severity/Targets Are Incorrect?

A. CAC 1000+ and LDL-C goal <55mg/dL
B. Mild CAC and LDL-C goal <70mg/dL
C. CAC 100-299 and LDL-C goal <70mg/dL
D. CAC 300-999 and LDL-C goal <70mg/dL

CAC Score Guided Rx of Subclinical Atherosclerosis



Incidental CAC on a nongated CT scan can also be used to guide therapy.

-If mild, LDL-C goal <100 mg/dL.

-If moderate or severe, LDL-C goal is <70 mg/dL.

Absence of incidental CAC should not be used to defer Rx given the low negative predictive value of nongated scans.

J Am Coll Cardiol.2026:XX:XXX-XXX; *Circulation*. 2026;153:e00–e00
Blumenthal, R.S., Morris, P.B., et al. 2026 ACC/AHA Guideline on the Management of Dyslipidemia. *Circulation*.

Takeaway #2

- Any CAC favors lipid lowering therapy in addition to lifestyle modifications
- If there is no evidence of subclinical atherosclerosis, then proceed with PREVENT-based risk assessment

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Higher Risk Conditions

- **HIV**
- **Adverse Pregnancy Outcomes**
  - Gestational Hypertension, Pre-Eclampsia, Eclampsia
- **Chronic inflammatory disorders**
  - RA, Lupus, Inflammatory Arthritis, etc.

Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423

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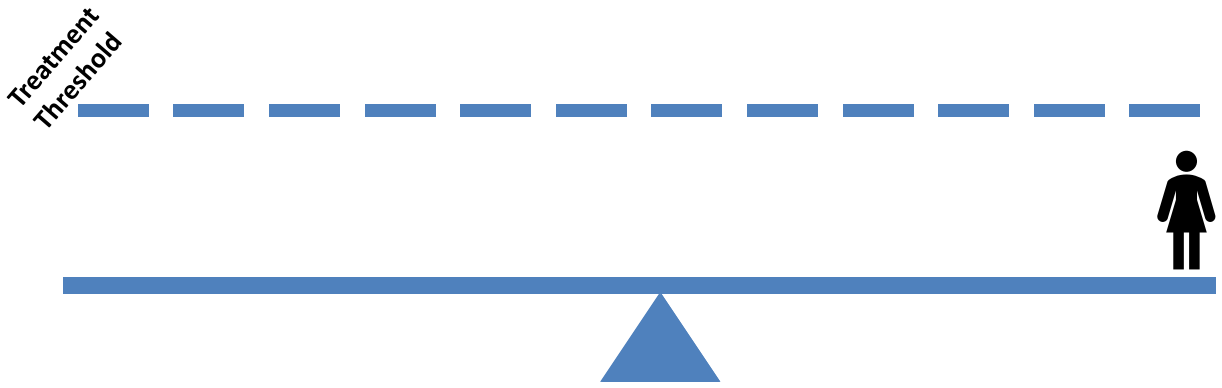
The Seesaw of Risk



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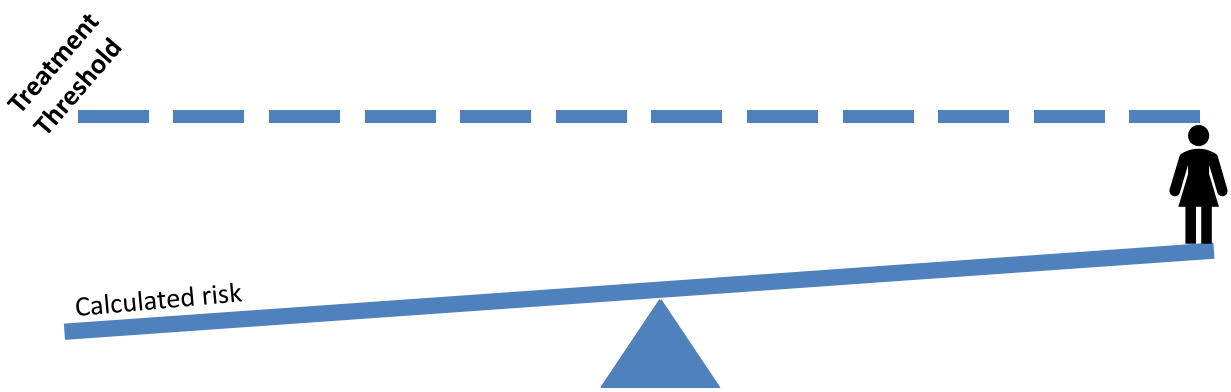
The Seesaw of Risk



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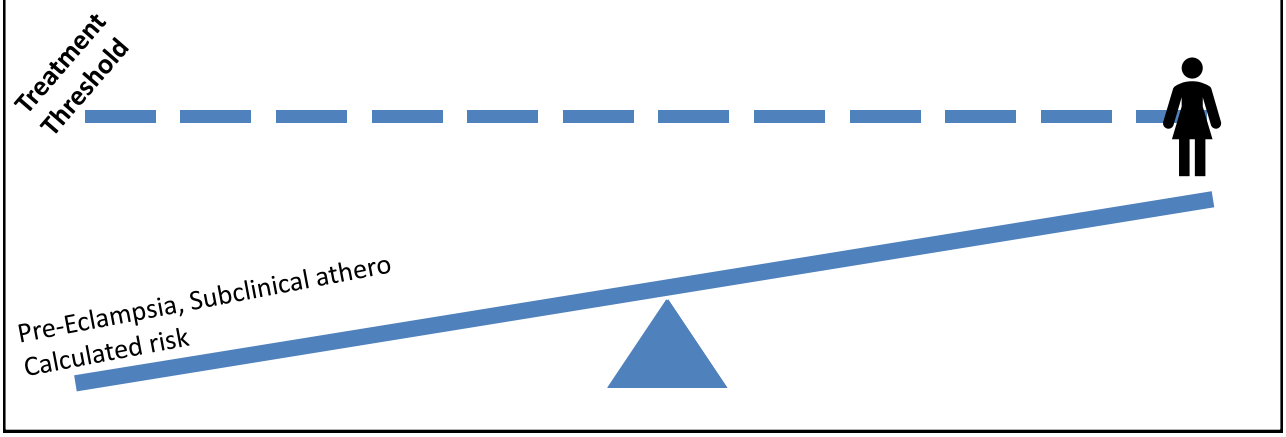

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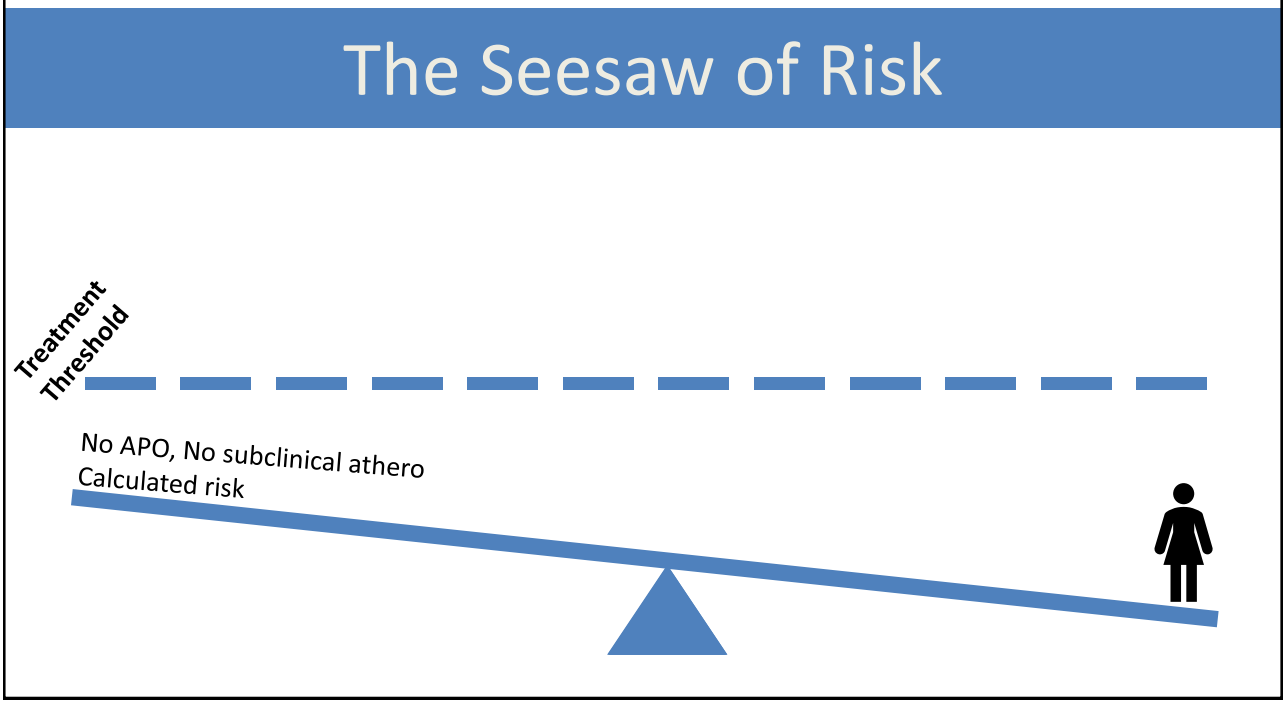
The Seesaw of Risk



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Hypertriglyceridemia

- Risk-enhancing factor
  - >150mg/dL, if fasting
  - >175mg/dL, if non-fasting
- Consider lipid referral if >400mg/dL

Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423

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Hypertriglyceridemia Management

- Diet/Lifestyle in all
  - Increasing physical activity
  - Reduce the following:
    - Added Sugar
    - Total Fat
    - Alcohol
- Weight loss, if needed

Class 1: Potential addition of statin therapy (TGL ≥150mg/dL)

Class 2a: Prescription strength omega-3s and fibrates (TGL ≥500mg/dL)

Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423

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When to Refer to a Specialist?

- Concern for heritable cholesterol disorders
- Extremes of risk, i.e. very early MI or very abnormal risk factors
- Significantly elevated triglycerides
- Concerns about drug interactions
  - Medical comorbidities
  - Considering pregnancy, pregnant, postpartum

Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423

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Takeaway #3

- Ask about associated conditions that increase ASCVD risk
- Incorporate into shared decision-making conversation
- Consider lipid specialist referral to assist in co-management

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Objective 3

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Risk/Treatment Paradigm

Patient Risk

Low Intermediate High

Treatment Intensity



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Types of Lipid Lowering Therapy

- Statins
- Non-statins
  - Ezetimibe
  - Bempedoic acid
  - PCSK9-based therapies

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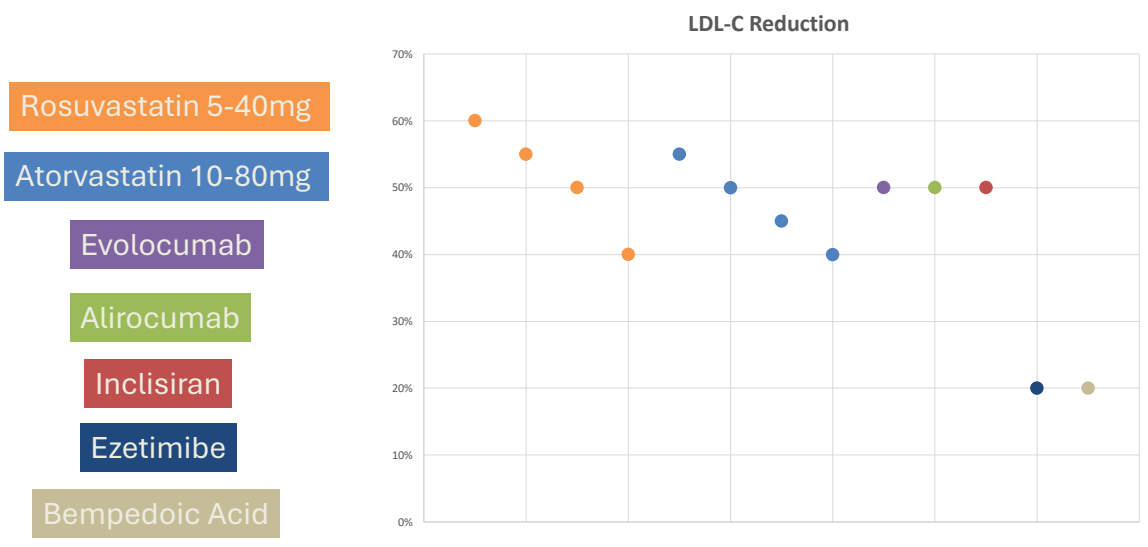
Estimated LDL-C Reduction



Adapted from Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423
Adapted from https://www.uptodate.com/contents/search?search=statin%20comparison%20chart

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Estimated LDL-C Reduction

- High-intensity statins (50+%)
  - Rosuvastatin 20mg or 40mg
  - Atorvastatin 40mg or 80mg
- Moderate-intensity statins (30%-50%)
  - Most other statin doses/combinations

- NB—not covering low-intensity statins

Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423

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Managing Statin Intolerance

- Good history
  - What happened? What dose? Time course?
  - Concurrent medications?
- Other statins tried?
- Was any work-up done at the time?
- Shared decision-making re: personal risks/benefits to determine if re-trialing is indicated

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Managing Statin Intolerance

- If only lipophilic statins have been tried, try hydrophilic statins
  - Rosuvastatin or pravastatin
- Start with lowest dose and ramp up
- Goal: Highest tolerated dose

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What About Supplements?

- Commonly used supplements, include red yeast rice, berberine, plant sterols, fish oil, etc.
- Head-to-head trial of moderate-intensity rosuvastatin and common supplements found that none were as efficacious as rosuvastatin 5mg

Class 3: No benefit for using dietary supplements for treating lipids

Laffin LJ et al. https://doi.org/10.1016/j.jacc.2022.10.013
Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423

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Takeaway #4

- Concern for statin related adverse events are common
- Obtain a good history and discuss with patients to determine if and when to re-challenge
- If re-challenging, consider low-dose and a ramp up

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Picking Medications

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Picking Medications

53

Picking Medications

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When to Check Labs?

- At baseline
- If lifestyle changes only, after 3-6 months
- >4 weeks after lipid lowering therapy change
- Include apoB when metabolic milieu present to assess for apoB/LDL-C discordance

Blumenthal RS, et al. https://doi.org/10.1161/CIR.0000000000001423

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Takeaway #5

- Think of where you're starting and where you need to go for lipid lowering
- Use a combination of lifestyle and medication(s) to get there
- If discordance, use apoB goal

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ARS Question 3

Which of These Combinations Is Unlikely to Achieve More Than a 50% LDL-C Reduction?

A. Alirocumab 150mg every other week
B. Atorvastatin 20mg + Ezetimibe 10mg
C. Bempedoic Acid 180mg daily
D. Rosuvastatin 40mg daily

Summary

- Personalize risk and think of the cumulative exposure of risk factors as well as incremental risk increase
  - Higher Risk Conditions
- Subclinical atherosclerosis, if present, can help simplify risk assessment and recommendations
- Lifestyle therapy and medications, as needed
  - Remember→ Where are you starting, Where are you going?