

## PRACTICAL ADVICE FOR CLINICIANS

### 1 When to Measure hsCRP

- Measure in stable patients at the time of LDL evaluation.
- Do not test when patients are acutely ill.<sup>1</sup>

### 2 How to Interpret High Values

- If hsCRP is greater than 10 mg/L, testing should be repeated when the patient is stable to ensure the elevation reflects cardiovascular risk and not the acute phase response.<sup>1</sup>
- Obesity is not a confounder—hsCRP data are independent of BMI.<sup>6</sup>
- This clarification is especially important as routine hsCRP screening becomes more widespread; clinicians should be reassured that elevated values in obesity are expected and actionable.

### 3 Clinical Integration

- *Health Care Professionals will not treat what they do not measure—hsCRP should be part of routine cardiovascular risk assessment.*<sup>1</sup>
- Combine hsCRP with lipid panels, lifestyle assessments, and comorbidity profiles.



## CONCLUSION

- 1 hsCRP is a powerful biomarker in preventive cardiology.
- 2 It complements lipid measurements and helps identify patients who may benefit from multiple novel therapies.
- 3 Incorporating hsCRP into routine practice can enhance cardiovascular risk stratification and treatment personalization.
- 4 The time for universal hsCRP screening in primary and secondary prevention is now, as its combination with cholesterol testing offers significant clinical value.<sup>1</sup>



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## REFERENCES

1. Mensah, G, Arnold, N, Prabhu, S, et al. Inflammation and Cardiovascular Disease: 2025 ACC Scientific Statement: A Report of the American College of Cardiology. *JACC*. null2025, 0 (0). <https://doi.org/10.1016/j.jacc.2025.08.047>
2. Ridker PM, Bhatt DL, Pradhan AD, et al on behalf of the PROMINENT, REDUCE-IT, and STRENGTH Investigators. Inflammation and cholesterol as predictors of cardiovascular events among patients receiving statin therapy: a collaborative analysis of three randomized trials. *Lancet* 2023;401:1293-1301.
3. Ridker PM, Lei L, Louie M et al. Inflammation and cholesterol as predictors of cardiovascular events among 13970 contemporary high-risk patients with statin intolerance. *Circulation* 2024;149:28-354
4. Libby P, Hansson GK. Inflammatory factors driving atherosclerotic plaque progression: new insights. *Circ Res*. 2015;116(7):1132-1149. doi:10.1161/CIRCRESAHA.116.305366
5. Bay B, Tanner R, Gao M, Oliva A, Sartori S, Vogel B, Gitto M, et al. Residual cholesterol and inflammatory risk in statin-treated patients undergoing percutaneous coronary intervention. *Eur Heart J* 2025;46:3167-3177.
6. Ridker PM, Moorthy MV, Cook NR, Rifai N, Lee I-M, Buring JE. Inflammation, cholesterol, lipoprotein(a), and 30-year cardiovascular outcomes in women. *N Engl J Med* 2024;391:2087-97.
7. Kraaijenhof JM, Nurmohamed NS, Nordestgaard AT, et al. Low-density lipoprotein cholesterol, C-reactive protein, and lipoprotein (a) universal one-time screening in primary prevention: the EPIC-Norfolk Study. *Eur Heart J* 2025;46:3875-3884.
8. Mazhar F, Faucon AL, Fu EL et al. Systemic inflammation and health outcomes in patients receiving treatment for atherosclerotic cardiovascular disease. *Eur Heart J* 2024;45:4719-4730.
9. Steg PG, Szarek M, Jukema JW, Bhatt DL, Bittner VA, Diaz R, Fazio S, et al. Relation of low-density lipoprotein cholesterol, high sensitivity C-reactive protein, and lipoprotein(a) each to future cardiovascular events and death after acute coronary syndrome on high-intensity statin therapy. An analysis of the placebo arm of ODYSSEY Outcomes. *Circulation* 2025;151:1047-50.
10. Nidorf SM, Fiolet ATL, Mosterd A, et al. Colchicine in patients with chronic coronary disease. *N Engl J Med* 2020;383:1838-1847.
11. Liuzzo G, Ridker PM. Universal screening for hsCRP in patients with atherosclerotic disease: a major therapeutic opportunity. *Eur Heart J* 2024;45:4731-4733.
12. Galbete C, Kröger J, Jannasch F, et al. Associations of the Mediterranean diet with inflammatory biomarkers in the European Prospective Investigation into Cancer and Nutrition (EPIC) study. *Br J Nutr*. 2016;116(2):316-325. doi:10.1017/S0007114516001909
13. Juraschek SP, Kovell LC, Appel LJ, et al. Effects of diet and sodium reduction on cardiac injury, strain, and inflammation: the DASH-Sodium Trial. *J Am Coll Cardiol*. 2021;77(21):2625-2634. doi:10.1016/j.jacc.2021.03.320
14. Zehra A, Gami A, Patel J. The evolving role of colchicine in coronary atherosclerosis management: timing may be everything. *American College of Cardiology*. Published April 7, 2025. Accessed October 10, 2025. <https://www.acc.org/Latest-in-Cardiology/Articles/2025/04/07/11/00/The-Evolving-Role-of-Colchicine-in-Coronary-Atherosclerosis-Management> [www.acc.org]



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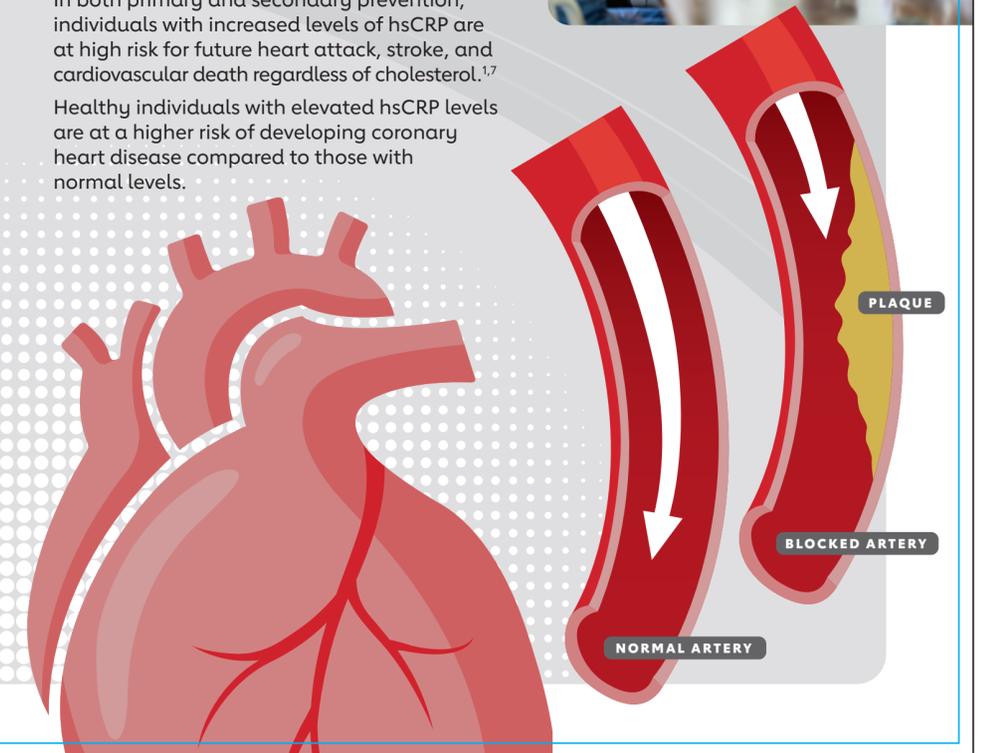
# hsCRP: Toolkit for Professionals

*"The time for taking action has arrived"*  
2025 ACC Scientific Statement on Inflammation and Cardiovascular Disease

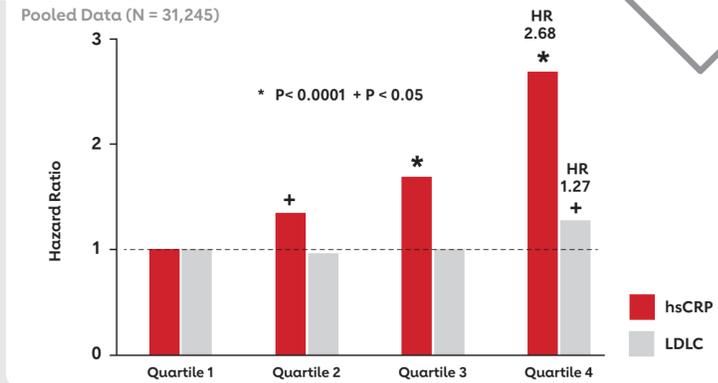
High-sensitivity C-reactive protein (hsCRP) is a measure of silent low-grade inflammation in the arteries.

In both primary and secondary prevention, individuals with increased levels of hsCRP are at high risk for future heart attack, stroke, and cardiovascular death regardless of cholesterol.<sup>1,7</sup>

Healthy individuals with elevated hsCRP levels are at a higher risk of developing coronary heart disease compared to those with normal levels.



## CARDIOVASCULAR DEATH



Ridker et al, Lancet 2023;401:1293-1301

## CLINICAL UTILITY

### 1 Detects low-grade systemic inflammation

### 2 Assess cardiovascular risk

- hsCRP provides important and clinically actionable prognostic information independent of traditional cardiovascular risk factors, including LDL-C, obesity, hypertension, family history, smoking, and exercise.<sup>1</sup>
- Contemporary data show that hsCRP is a valuable predictor of future cardiovascular events, with a magnitude of effect at least as large as that of LDL-C among those taking and not taking statin therapy.<sup>8</sup>
- "Universal screening of hsCRP in both primary and secondary prevention patients, in combination with cholesterol, represents a major clinical opportunity and is therefore recommended".<sup>1</sup>

ACC SCIENTIFIC STATEMENT

**Inflammation and Cardiovascular Disease:  
2025 ACC Statement**

A Report of the American College of Cardiology

## PREVENTION

### 1 Primary Prevention

- hsCRP predicts cardiovascular risk in individuals without known cardiovascular disease and among those without other traditional risk factors, including obesity.<sup>7</sup>
- Identifies individuals who will benefit from early lifestyle interventions.
- Identifies individuals who will benefit from statin therapy even if cholesterol levels are in the low to normal ranges.<sup>7</sup>
- Universal screening in Primary Prevention is advocated by the 2025 ACC Scientific Statement on Inflammation and Cardiovascular Disease.<sup>1</sup>

### 2 Secondary Prevention

- Elevated hsCRP ( $\geq 2$  mg/L) is associated with increased risk of recurrent major adverse cardiovascular events (MACE), heart failure, cardiovascular death, and all-cause mortality.<sup>8</sup>
- Universal screening in Secondary Prevention is also advocated by the 2025 ACC Scientific Statement on Inflammation and Cardiovascular Disease to assist management and guide adjunctive anti-inflammatory therapy.<sup>1</sup>

## PHARMACOLOGICAL INTERVENTIONS

### 1 Statins

Lower both LDL-C and hsCRP; reduce cardiovascular events even among those with elevated hsCRP and normal LDL-C.<sup>7</sup>

### 3 Low-Dose Colchicine

FDA-approved to reduce cardiovascular event rates in patients with chronic stable atherosclerosis as an adjunct to statin therapy.<sup>14</sup>

### 2 Bempedoic Acid

Reduces hs-CRP and LDL-C; effective in statin-intolerant patients.<sup>10</sup>

### 4 Emerging Therapies

IL-1 $\beta$  and IL-6 inhibitors under investigation for targeted inflammation reduction.<sup>4</sup>

## MODIFYING INFLAMMATION WITH LIFESTYLE

### 1 Diet

- Anti-inflammatory diets (Mediterranean, DASH) lower hsCRP.<sup>12,13</sup>
- Emphasize fruits, vegetables, whole grains, omega-3s, and olive oil

### 2 Exercise

- Regular moderate activity reduces hsCRP levels.<sup>5</sup>

### 3 Other Factors

- Weight management, smoking cessation, stress reduction, and adequate sleep all contribute to lower inflammation.<sup>1</sup>



## CARDIOVASCULAR PREVENTION AND TREATMENT

### 1 Integrated Risk Management

- Combine lipid-lowering and inflammation-reducing strategies.
- hsCRP helps identify residual inflammatory risk even after LDL-C targets are met.<sup>3</sup>

### 2 Clinical Decision-Making

- Use hsCRP to guide therapy escalation for statin dosing and consideration of low-dose colchicine.<sup>1</sup>
- Tailor interventions based on hsCRP levels and comorbidities.

