

Coronary Artery Calcium

Highly specific disease marker of Coronary Artery Disease (CAD)

- Strong quantitative correlation between coronary calcium score (CACS) and plaque burden
- Provides independent and incremental information over traditional risk factors in predicting cardiac events
- Identifies high risk patients in need of aggressive preventive therapy
- Prevalence increases with age

The Agatston calcium score is a linear scale with four calcium score categories:

0	→	None
1-99	→	Mild
100-400	→	Moderate
>400	→	Severe

Calcium score correlates directly with risk of events and likelihood of obstructive CAD*

Calcium Score	Relative Risk for Cardiovascular events
0-10	1
11-100	1.9
101-400	4.3
401-1000	7.2
>1000	10.8

CAS = 0 – 0.4% event rate over five to seven years

ACCF/AHA Clinical Expert Consensus Document

- CAC scoring has a high level of quality evidence for risk stratifying asymptomatic patients with intermediate AHA/ACC ASCVD risk score
- CAC scoring predicts CV death or MI at three to five years
- CAC scoring is independently predictive of outcome over and above risk factors
- Obtaining CAC in low and high risk groups is not helpful, but is useful in intermediate risk

Clinical Usefulness Of Coronary Artery Calcium Score

- Using a calcium score to screen patients with moderate (intermediate) AHA/ACC ASCVD risk score
 - o Positive CAC scans indicate incremental risk
 - o Alters therapeutic goal (LDL, BP, etc.)
- Improve compliance with risk reducing treatment

How To Obtain A Coronary Artery Calcium Score

If you wish for your patient to have a calcium scoring, you can schedule the calcium score test directly with radiology by calling Centra Radiology at **434.200.5500**. Scans can be done at Centra Lynchburg General, Centra Virginia Baptist, Centra Bedford Memorial, and Centra Southside Community hospitals, and Centra Gretna Medical Center.

All patients with a CAC score of >100 or >75th percentile should be referred for a cardiovascular evaluation by calling 434. 200.5252.



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