

Test/Tool	What It Measures	Key Outputs	Strengths	Limitations	Typical Use Case
<b>Traditional CAC (Coronary Artery Calcium) Scoring</b>	Calcium deposits in arteries as a marker of plaque buildup (atherosclerosis). Focuses on risk prediction, not current blockages or flow.	Numerical score (e.g., Agatston: 0 = low risk, >400 = high risk).	Cheap, quick, low radiation; great for screening asymptomatic people; predicts future heart events well.	Misses soft (non-calcified) plaque; doesn't assess blood flow or blockage impact.	First-line risk assessment in healthy adults (e.g., deciding on statins/lifestyle changes). Like checking the "ripeness" of potential issues.
<b>QAngio (Quantitative Angiography)</b>	Artery dimensions, narrowings (stenosis), and estimated blood flow from invasive angiogram images.	Stenosis percentage, vessel measurements, Quantitative Flow Ratio (QFR, e.g., <0.80 = flow issue).	Precise for cath lab procedures; helps guide stents without extra invasive tools.	Requires invasive catheter; not for screening; limited to geometry, not deep plaque details.	During angiograms for patients with suspected severe blockages; procedural planning. Like measuring the "structure" in a detailed, hands-on way.
<b>HeartFlow Analysis</b>	Simulated blood flow through arteries using CT angiography data; assesses if blockages cause ischemia (reduced heart blood supply).	3D model with Fractional Flow Reserve (FFRct, e.g., <0.80 = significant issue).	Non-invasive functional insight; reduces unnecessary invasive tests; personalized modeling.	Needs high-quality CT scan; processing time/cost; focuses more on flow than plaque types.	Symptomatic patients or intermediate CT findings; deciding if intervention is needed. Like evaluating the "juiciness" or flow dynamics.
<b>Cleerly Heart Analysis</b>	Detailed plaque volume, types (soft vs. calcified), and composition from CT angiography; predicts rupture risk and tracks changes.	Plaque volumes by type, stenosis, CAD staging (0-4), ischemia estimates.	Spots vulnerable soft plaque CAC misses; monitors treatment effects (e.g., statins); AI-precision for early detection.	Requires CT angiography; newer tech with less long-term data; anatomy-focused over pure function.	Comprehensive evaluation in at-risk folks; tracking progress when symptoms or risks persist despite low CAC. Like examining the "intricate details" of plaque biology.