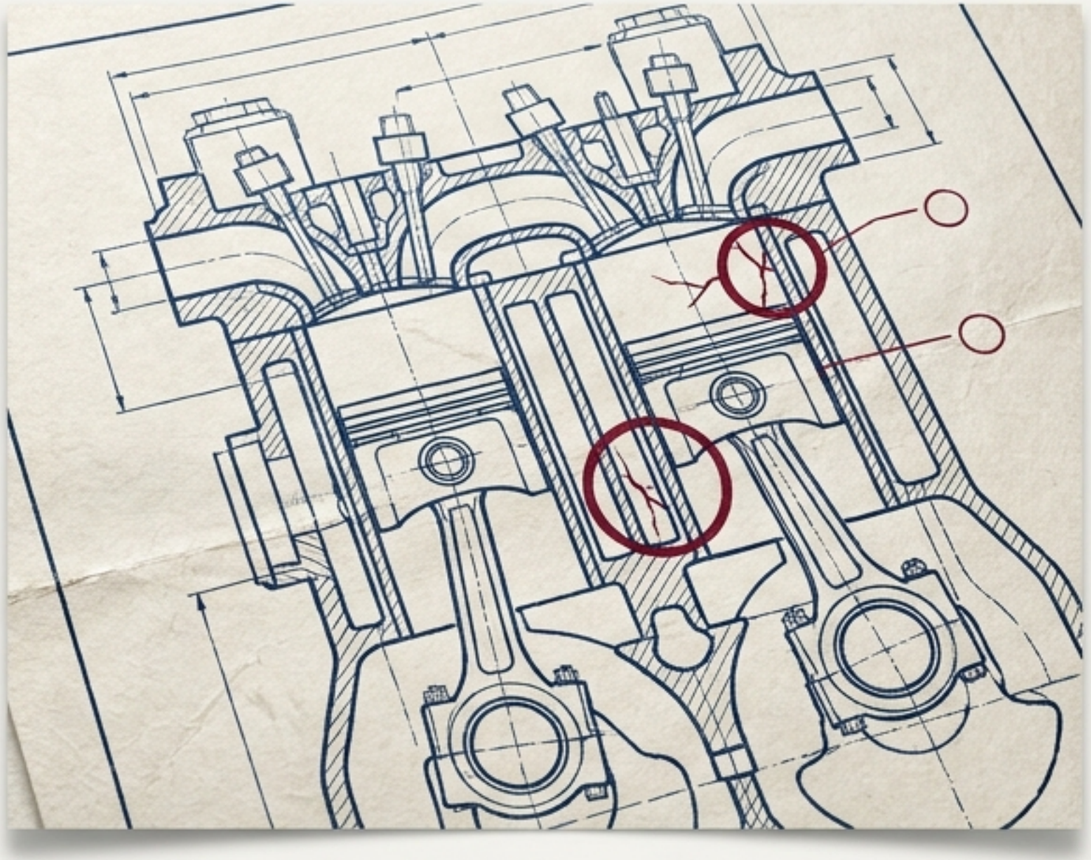
The Heart Health App That Finally Asks the Right Question

Heart disease remains the number one cause of death in the United States. Roughly half of all Americans have a family history of cardiac events. Yet the tools we use to predict our risk are looking in the wrong place.

Wearables Track the Present. They Cannot Read the Blueprint.

The Speedometer: Heart rate monitors, step trackers, and sleep rings are excellent speedometers. They tell you exactly what your heart is doing right now.



The Diagnostic Log: What no wearable can tell you is what your heart is likely to do in 10, 20, or 30 years based on the factory build—the genetic blueprint inherited from your family.

A smartwatch knows your resting heart rate. It has no way of knowing your brother suffered a fatal heart attack at 42.

The Flawed Checkbox of Standard Medicine

The Standard Tool: Widely used clinical calculators, like the Framingham Risk Score, reduce your entire family history to a binary Yes/No question.

The Blind Spot: Because Framingham is driven by your chronological age rather than inherited biology, a 20-year-old with severe family history can be falsely categorized with a 10-year risk of under 1%.

The Reality: The inherited signal of heart disease is a spectrum of severe risk, not a checkbox.

Treating a Scratch Like a Totaled Car

Treating a grandparent dying of a heart attack at 82 and a sibling collapsing from sudden cardiac death at 39 as the exact same Yes on an intake form is like treating a minor parking lot scratch and a totaled car as the same accident on a vehicle report.

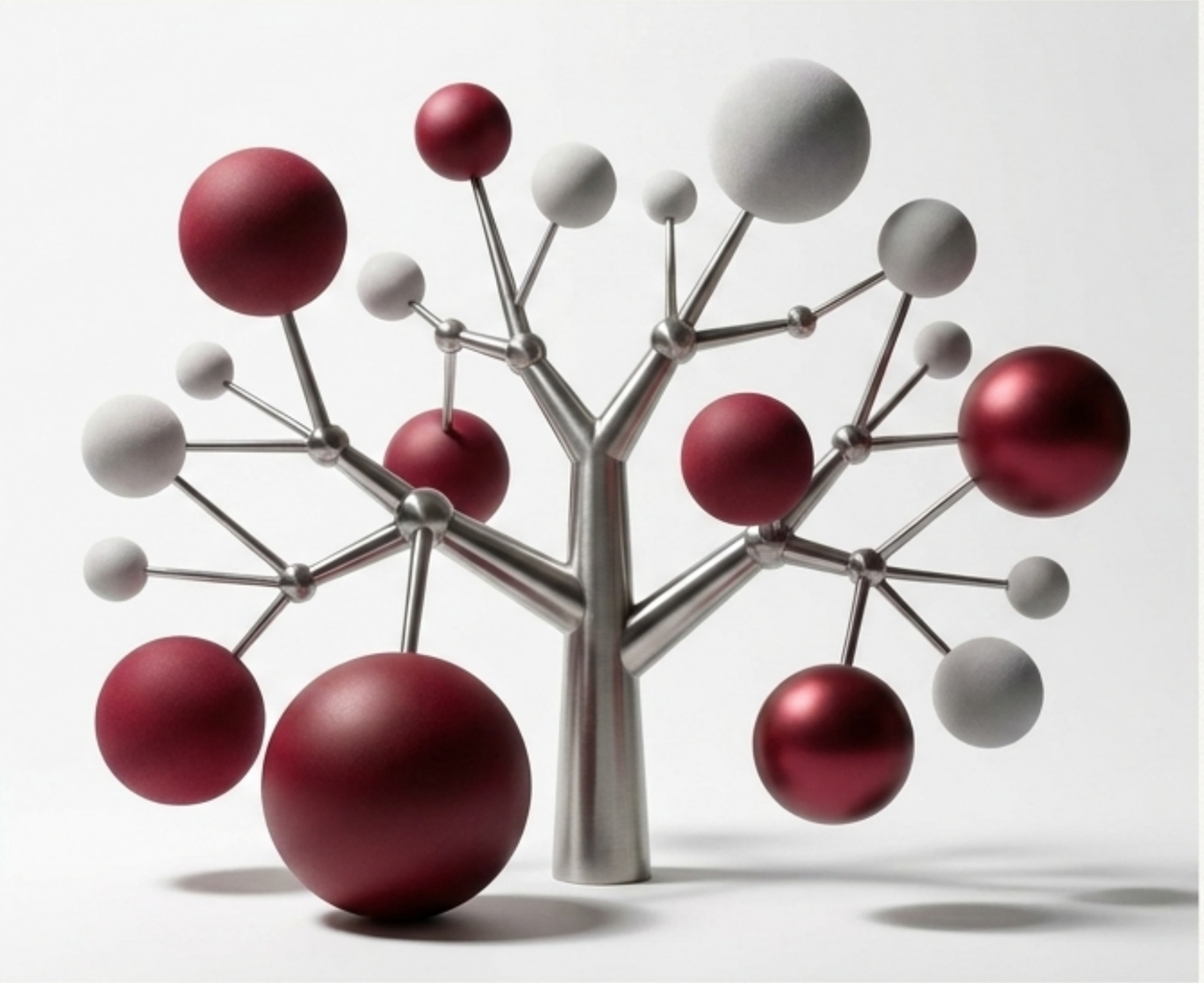
They are not the same thing. The inherited signal is fundamentally different, and standard clinical calculators lose this crucial information.

YES

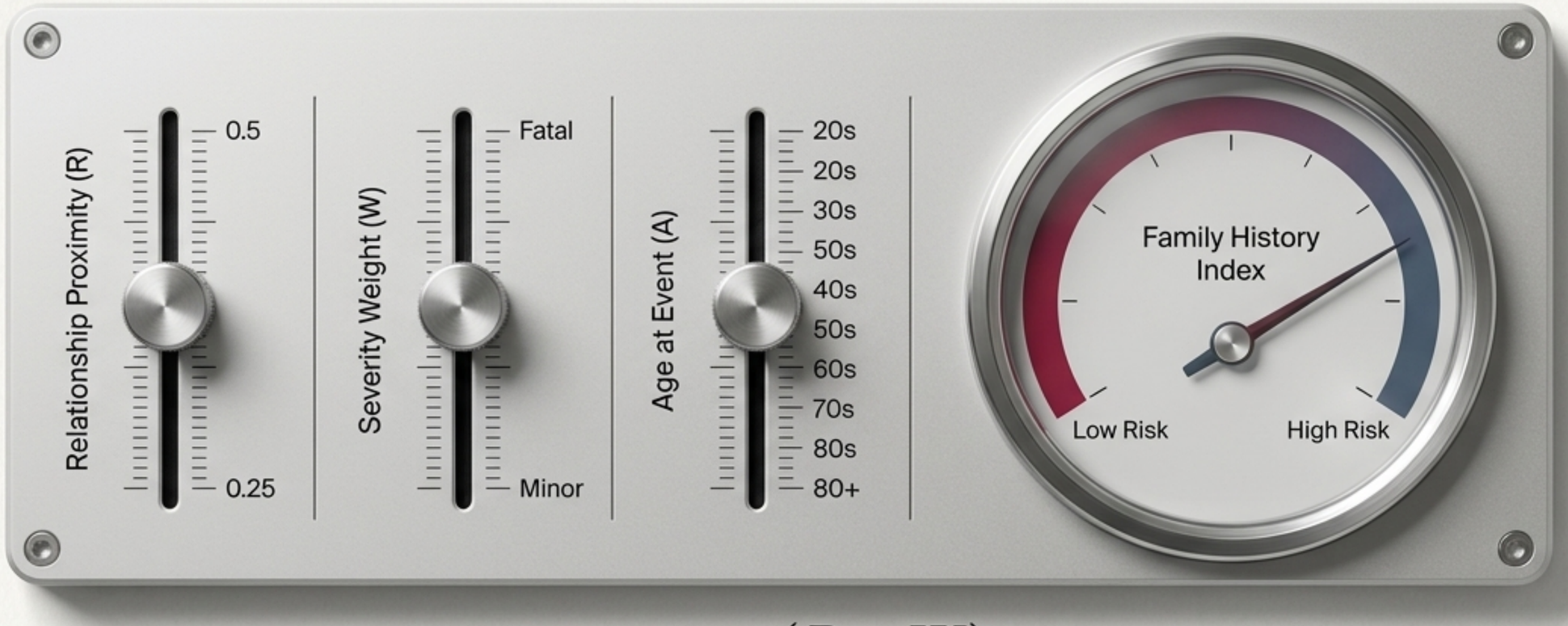
Mapping the Signal: Who, Not Whether

The Heart Risk Calculator represents a completely new framework in preventative cardiology. Instead of a single checkbox, it organizes your family's cardiac history across three critical dimensions to reveal your true inherited trajectory:

1. **Relationship Proximity:** First-degree vs. second-degree relatives.
2. **Age at Event:** Premature events carry a massive genetic weighting.
3. **Severity:** Fatal events vs. non-fatal disease management.



The Inherited Hazard Coefficient (IHC)



$$H = \sum \frac{(R \times W)}{A}$$

This formula calculates a Family History Index that reflects the true, compounding gene-dosed signal in your family tree—capturing what a simple yes loses.

The Preventative Cardiology Toolbelt

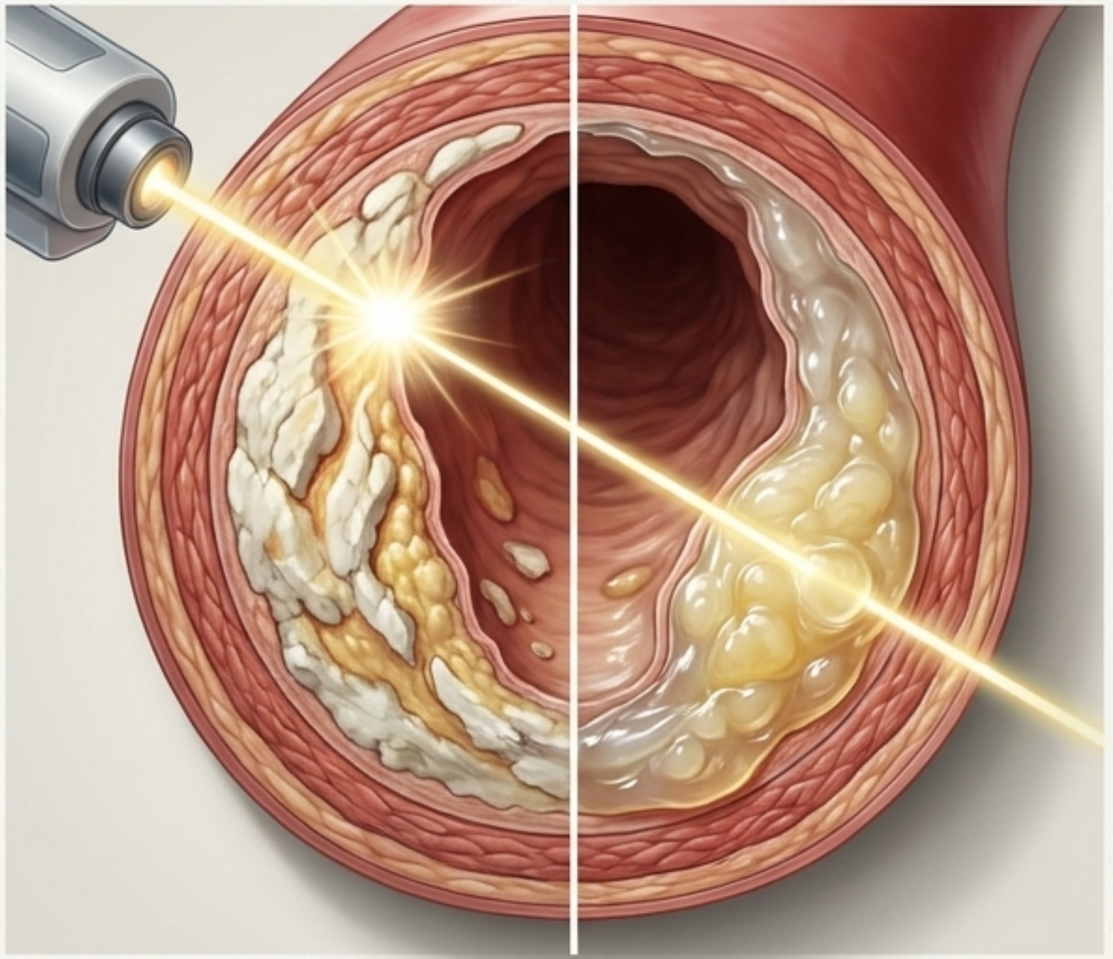
	Wearables (Apple Watch/Fitbit)	**Standard Calculators** (Framingham)	**The Heart Risk Calculator** (IHC)
What It Tracks	Present biometrics & chronological data	General age-based risk	Genetic trajectory & family data
The Core Blind Spot	Inherited family history	Gene dosing and premature severity	Present-day lifestyle habits
Clinical Outcome	Prompts daily habit changes	General risk categorization	Directs specific, advanced clinical imaging interventions

These are complementary tools, not competing ones. But only one captures the inherited signal that determines if standard screening is sufficient.

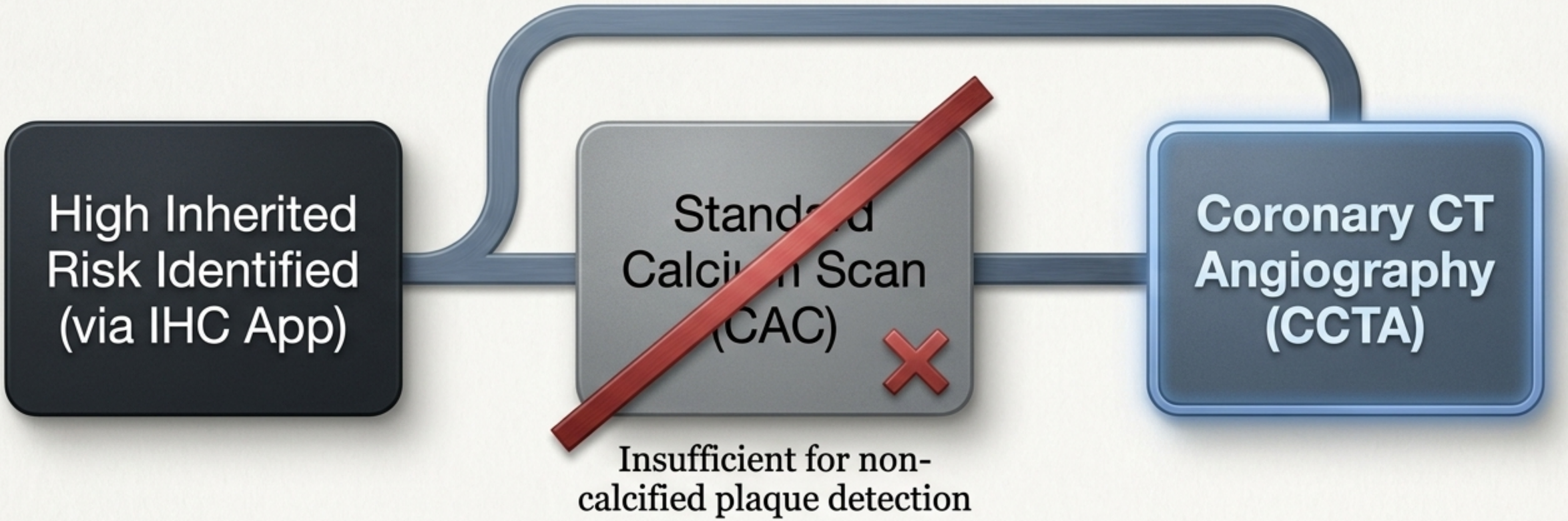
The Imaging Trap: Searching for Plastic Explosives with a Metal Detector

One of the most alarming findings in recent cardiovascular research is the Imaging Trap. A standard Coronary Artery Calcium (CAC) scan—the most common screening tool—searches for calcified plaque.

The Danger: For gene-dosed individuals with a family history, dangerous, non-calcified soft plaque can actively build up while the CAC scan returns a perfect score of zero. A zero calcium score here is not reassurance. **It is a fatal false negative.**



Bypassing the Trap: The 2025 CAUGHT-CAD Protocol



The 2025 CAUGHT-CAD randomized trial confirmed that for patients with premature family history, CT Angiography is required to detect hidden soft plaque and guide timely, life-saving intervention.

Changing the Clinical Conversation

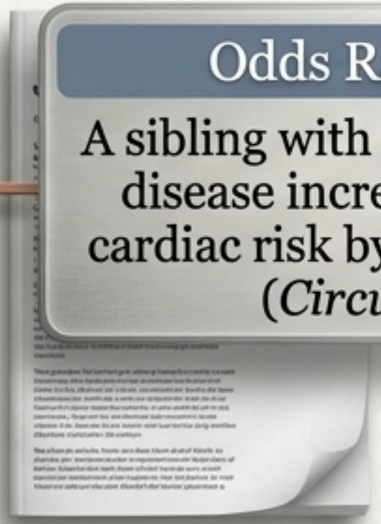
The Heart Risk Calculator generates a discussion-ready summary designed to turn a routine physical into a life-saving cardiovascular conversation. It arms you with the exact questions you must ask:

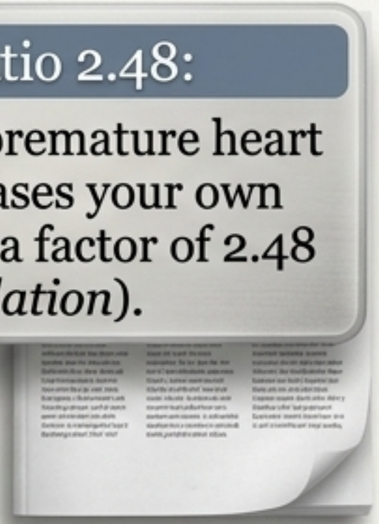
Given my family pattern, could I have soft plaque that a standard calcium scan would miss?

Does the gene-dosing effect of my family history change how my Framingham score should be interpreted?

Should I bypass a CAC scan and be referred directly for a Coronary CT Angiography?

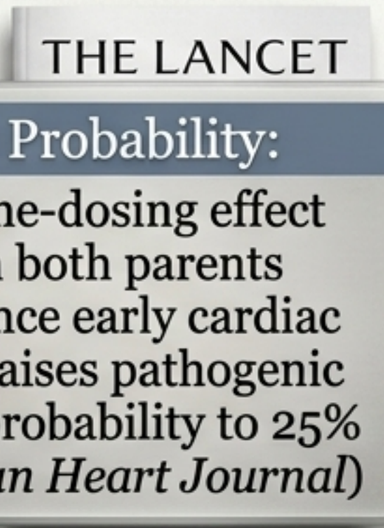
A Framework Built on 40+ Peer-Reviewed Papers





Odds Ratio 2.48:

A sibling with premature heart disease increases your own cardiac risk by a factor of 2.48 (*Circulation*).



25% Probability:

The gene-dosing effect when both parents experience early cardiac events raises pathogenic variant probability to 25% (*European Heart Journal*)

Developed by Peter Megdal, PhD—a biopharmaceutical scientist and researcher who translates decades of cardiovascular epidemiology into accessible tools.

Your Family History is Data. It's Time to Use It.

The Heart Risk Calculator exists for everyone who has watched their family history disappear into a flawed checkbox that changes nothing about their care. It asks the critical question that wearables and standard clinical calculators were never designed to answer.

Available now on Google Play for $4.99.

(Disclaimer: This is an educational tool, not a medical device. Always consult a qualified healthcare professional.)