



TEST - patient name here

DOB 12/22/69 Age 52 Gender Female

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Referring Physician A4M-FL	Sonographer MICHAEL	

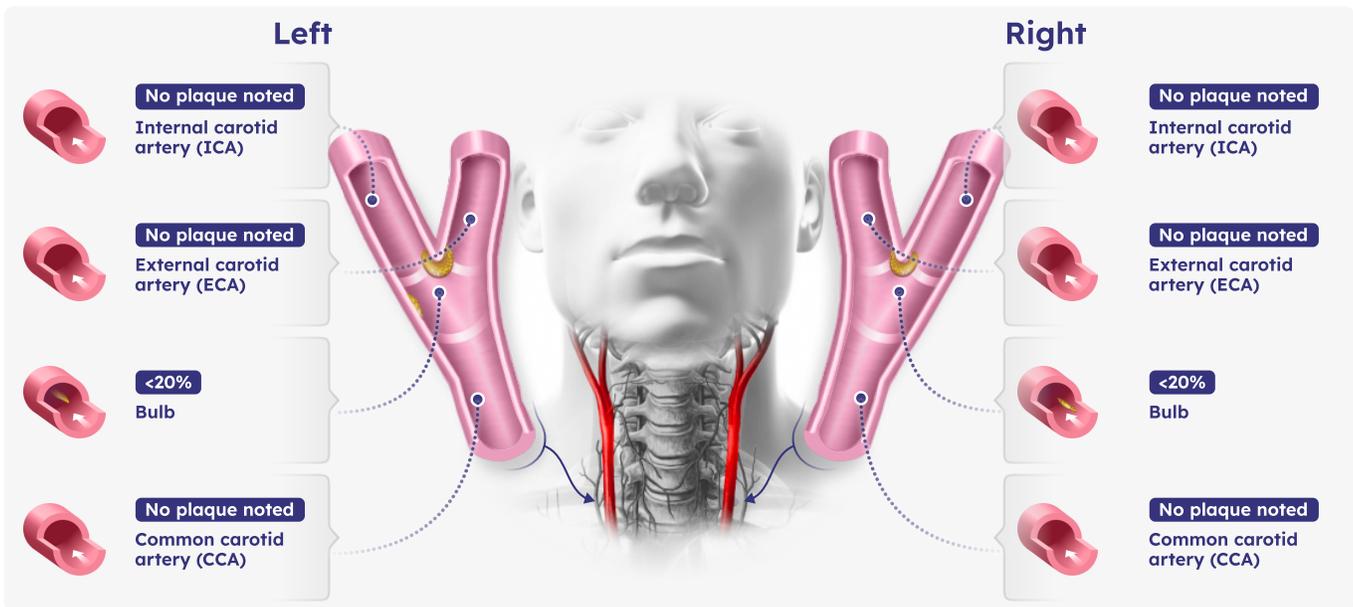
Visualized plaque and atherosclerotic burden assessment

68
Vascular Age
Vascular age is a measurement of the apparent age of your arteries. If your vascular age is higher than your chronological age, you may be at higher risk for developing cardiovascular disease.

0.759 mm
Carotid Intima-Media Thickness Test (C-IMT)
The C-IMT is a measurement of the thickness of the innermost two layers of the wall of your carotid artery. An increased thickness indicates the presence of an atherosclerotic disease process and vascular inflammation.

2.6 mm
Largest Plaque
Calcified
Plaques can be soft (highest risk), heterogeneous (moderate risk) or calcified (lower risk).

Artery Blockage



Carotid Intima-Media Thickness Test (C-IMT)

Your percentile score
89th

The American Society of Echocardiography (ASE) recommends that IMT \geq 75th percentile is considered high and indicative of increased cardiovascular risk.



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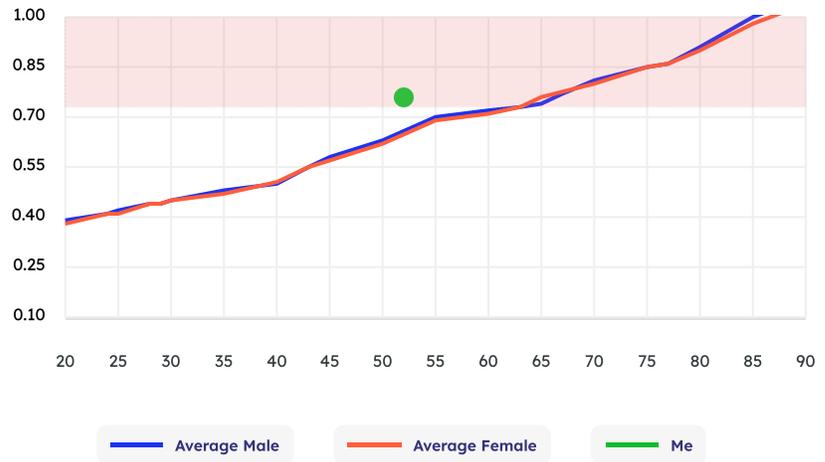
Carotid Intima-Media Thickness Test (C-IMT)

The intima is the innermost layer of your arteries and consists of the endothelium and connective tissue. The cells of the endothelium are very active and can sense blood flow and release signaling molecules that tell your blood vessels to expand or contract to control the amount of blood flow. Endothelial cells also release enzymes that control immune function and blood clotting. The media is the middle layer of your arteries and is made up of muscle cells and elastic fibers. This layer gives your arteries flexibility. Certain lifestyle factors such as smoking or eating processed foods can damage these layers causing them to become thickened and inflamed. When this happens, the artery loses flexibility and other functions and a cascade of problems such as plaque formation can follow. Current research shows that it takes years of well-executed optimal health decisions to heal these layers.

My CIMT Measurements

Date	Age at exam	Arterial Age	CIMT	Percentile
Apr 2022	52	68	0.759	89th

CCA IMT of General Population



Note: The data referenced in the C-IMT Reports History chart is based on the Atherosclerosis Risk in Communities Study (ARIC) study, which examined CCA IMT of the General Population with no coronary Heart History.



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Your results

What is plaque?

Plaque is a localized lesion in the artery wall formed by a buildup of materials that enter the artery wall from the bloodstream. Plaque is made up of fat, cholesterol, immune cells and cellular waste products that begins as soft material. Over time, the body will secure the plaque by making it fibrous and eventually will load it up with minerals such as calcium to prevent it from rupturing.

Soft plaque

Soft plaque which is often referred to as vulnerable plaque is newly formed and the most dangerous kind of plaque. It is responsible for the majority of cardiovascular events because it can easily rupture. When plaque ruptures it can cause a blood clot and cut off the supply of blood and oxygen to different tissues in the body. When plaque is seen, it is the definite presence of irreversible Cardiovascular disease. Once present, plaque cannot be removed, but it can be made less dangerous by supporting the body to stabilize it. Special attention should be given to the cap on the top of this plaque, which holds the loose/sticky material safely inside. Please consult with your care provider on a cardiovascular care plan to manage your risk.

Heterogeneous plaque

Heterogeneous Plaque is transitioning from soft, vulnerable plaque to calcified, mineralized or more stable plaque. This is a good sign, and means the body is securing the loose plaque. Continue to work with your medical provider to manage your risk.

Calcified or Echogenic Plaque

Calcified or Echogenic Plaque is plaque which has been mineralized and/or calcified. It is a more stable plaque and is much less likely to cause a clot by rupture or erosion. It is sometimes referred to as a Healed Plaque. The once loose materials have become calcified and secured indicating you are effectively managing your risk.

	Left plaque				Right plaque			
Artery	Plaque size (mm)	Artery blockage	Plaque Type	Velocity (cm/s)	Plaque size (mm)	Artery blockage	Plaque Type	Velocity (cm/s)
Common Carotid								
External Carotid								
Internal Carotid					1.97	<20%	Heterogenous	
Bulb	2.6	<20%	Calcified					

Physicians Notes:



Interpreting Medical Provider

The observed repeatability of IMT scores when using a standardized scanning and measuring protocol of 24 to 72 ultrasound images is within 1.68% with 95% confidence. Your physician should interpret this IMT result in conjunction with your other risk factors. Medical decision making must take a multitude of factors into account, and risk factor modification should be made only in consultation with your physician. Normal IMT results do not entirely exclude heart disease or cerebrovascular disease but indicate a decreased likelihood. If you have chest pain, shortness of breath, palpitations, neurologic symptoms such as unsteadiness or difficulty with vision or speech, consult your physician immediately. Also, the data graphed above is interpolated from many known studies. This information should be used in conjunction with your physician as a generalized estimate of your overall cardiovascular health. The plaque depictions are a vague representation and are for physician to patient communication purposes only.