

## Quality Control and Re-read Worksheet

Today's date: 9/15/20

QC Received by Heidi

Practice/Physician: Stephen Sims, MD

Office contact: N/A

Patient name: N/A

Scan date: 8/18/20

Reviewed by Todd

Response is made: \_\_\_\_\_

1 patient

Concerns:

Hi Todd,

I hope you are doing well, with all the challenges out there these days!

I have a particularly important patient question to ask.

A recent IMT result showed much worse soft plaque in the bulb, from 2.5mm to 3.8mm, of a patient despite starting atorvastatin 80 mg last year and continuing to follow extremely good exercise and lifestyle. He has lone A. fib, on aspirin, and is a biotech researcher, and extremely well-informed. He had a 0 cardiac calcium score, which is not a problem, as I explained to him, from his cardiologist, who is requesting the old and new IMT images to help try to explain the change.

I am hoping that you could please compare the images. I explained that a pre-existing soft plaque could have more of its cap become visible with improved ultrasound equipment, or further calcification. However, my review of the images does not show prior candidate fuzziness, that is obvious to me.

I would appreciate your recheck very much.

Patient J.M. dob 1/24/69, tested 8/18/20.

Thank you!

Steve

# CardioRisk Scan Patient Results

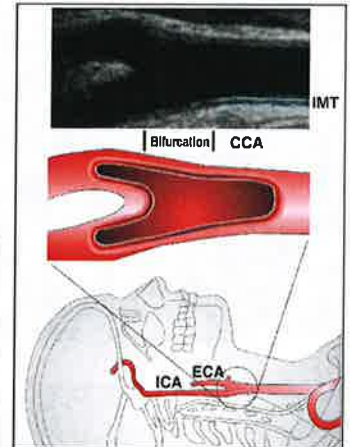
Patient Name: MCAULIFFE, JOSEPH  
 Gender: M  
 Date of Exam: 8/18/2020  
 Date of Birth: 1/24/1969  
 Referring Provider: STEPHEN SIMS

Patient Age	51	Patient IMT	0.66 mm
Arterial Age	50	Normal IMT	<.50 mm

## CV Event Risk

All measurements in mm

Test Criteria:	Normal	Moderate	High	Last Visit (2019) <sup>+</sup>	Alert Value*
Early Event Risk**			3.8	2.5	2
Average CCA Mean IMT	0.66			0.69	0.73
Average CCA Max Region		0.75		0.79	0.75
Plaque Burden**			6.5	2.5	



## Comments:

The following values are the largest Intima-media thickness (IMT) measurements found in each carotid artery segment. Any measurement equal to or 1.3mm is defined as 'plaque' and is characterized as being: S = Soft; H = Heterogeneous; or E = Echogenic (Includes mineral deposits like calcium). All measurements are in millimeters.

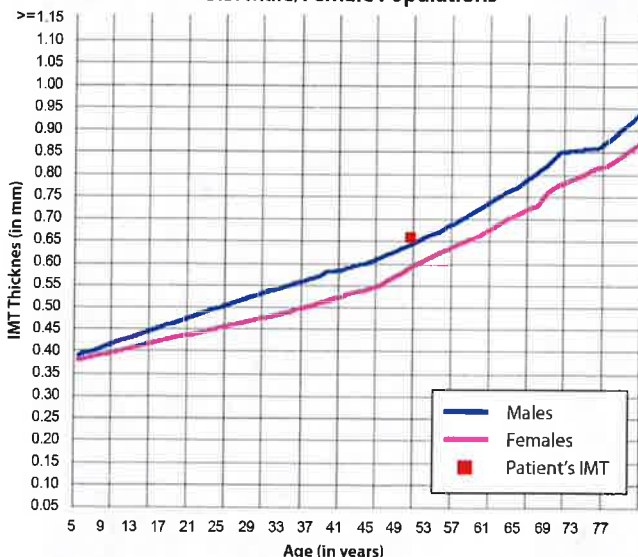
Right CCA .7; Bulb .8; Internal Carotid .8  
 Left CCA .7; Bulb 3.8 S; Internal Carotid 2.7 S  
 Doppler was used bilaterally.

### Comments from 9/17/2019 Scan

Right CCA .8; Bulb .9; Internal Carotid .8  
 Left CCA .7; Bulb 2.5 S; Internal Carotid .7  
 Doppler was used bilaterally.

- \*\* Early Event Risk refers to a patient's increased risk of having an event in the next 5.1 years  $\pm$  2.3 years. It does not suggest the patient will have an event in that time frame, only that the hazard ratio significantly increases (from 1 to between 4.1 and 6.7 depending on the patient's Framingham risk score) (D Baldassare et al / Atherosclerosis xxx 2006 xxx-xxxx)
  - + A progression rate of .034 mm or greater in the thickness of the mean IMT per year, increases the risk of future events significantly. (Hodis HN, et al / Ann Intern Med 1998;128:262-9)
  - \* The Alert Value is the threshold measurement at which this patient's risk is inflated beyond a 'Normal' reading.
  - \*\* Plaque Burden is the sum of the plaques found and measured. It does not have an Alert Value because plaques of any size are atherosclerotic and increase patient risk. The Plaque Burden score is intended to help physicians track progression of disease over time.
- Patients with values in yellow or red on ANY risk test criteria have inflated risk.

## Patient Arterial Age Compared to U.S. Male/Female Populations



Your Doctor should interpret the results from this report in conjunction with your other risk factors. Medical decision making takes a multitude of factors into account, and risk factor modification should be made in consultation with your Doctor. Arterial Age™: The mean distal 1 cm common carotid artery (CCA) IMT measured looks like the average same gender person in a general population which had no coronary heart history expressed as Arterial Age above. The risk assessment data provided above should be used with caution. Data from five different studies which used different criteria for participation, different training methods, and different scanning and reading protocols [A: Tonstad, S (1996) Arterioscler Thromb; B: Urbina, E (2002) Am J Cardiol; C: Oren, A. (2003) Arch Intern Med.; D: Tonstad, S. (1998) Eur J Clin Invest; E: Aminbakhsh, A (1999) Clin Invest Med] were used to create an approximate arterial age compared to normal populations found in these studies. Regression analyses was used to estimate population age over time based on the cited studies above. In a careful literature review, the data cited above is an approximation of the relationship between CIMT and age in epidemiologic studies. The above data relating age to CIMT is useful in comparing a single patient's result with a population mean, and takes on additional meaning when comparing a current CardioRisk CIMT score with a previous CardioRisk CIMT score on the same patient. It is important to note that these studies do not account for the highest risk patients, those who died from the disease.



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# CardioRisk™ Scan Patient Results

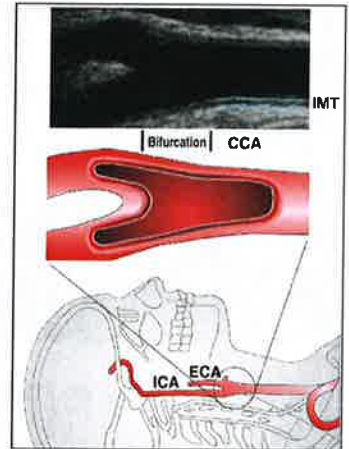
Patient Name: **MCAULIFFE, JOSEPH**  
 Gender: **M**  
 Date of Exam: **9/17/2019**  
 Date of Birth: **1/24/1969**  
 Referring Provider: **STEPHEN SIMS**

Patient Age	50	Patient IMT	0.69 mm
Arterial Age	54	Normal IMT	<.50 mm

## CV Event Risk

All measurements in mm

Test Criteria:	Normal	Moderate	High	Last Visit (2018)*	Alert Value*
Early Event Risk**			2.5	1.1	1.4
Average CCA Mean IMT	0.69			0.57	0.73
Average CCA Max Region		0.79		0.68	0.75
Plaque Burden**			2.5		



## Comments:

The following values are the largest intima-media thickness (IMT) measurements found in each carotid artery segment. Any measurement equal to or 1.3mm is defined as 'plaque' and is characterized as being: **S = Soft; H = Heterogeneous; or E = Echogenic** (Includes mineral deposits like calcium). All measurements are in millimeters.

**Right CCA .8; Bulb .9; Internal Carotid .8**  
**Left CCA .7; Bulb 2.5 S; Internal Carotid .7**  
**Doppler was used bilaterally.**

### Comments from 7/18/2018 Scan

Right CCA .7; Bulb .9; Internal Carotid .9  
 Left CCA .7; Bulb 1.1; Internal Carotid 1.0  
 Doppler was used bilaterally.

++ Early Event Risk refers to a patient's increased risk of having an event in the next 5.1 years  $\pm$  2.3 years. It does not suggest the patient will have an event in that time frame, only that the hazard ratio significantly increases (from 1 to between 4.1 and 6.7 depending on the patient's Framingham risk score) (D Baldassare et al / Atherosclerosis xxx 2006 xxx-xxxx)

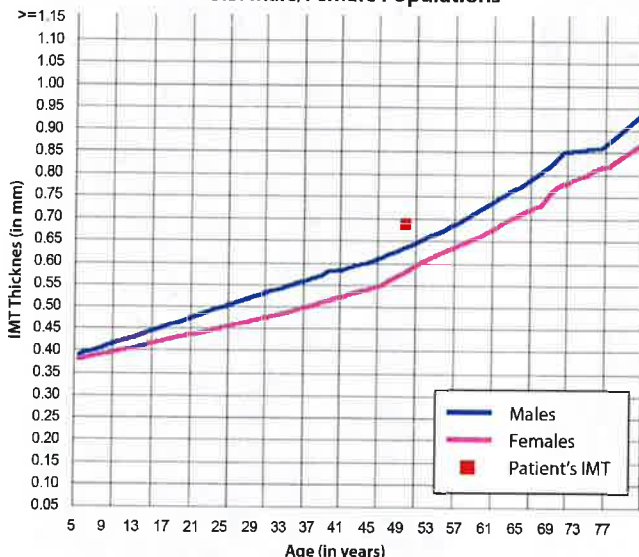
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