

Quality Control and Re-read Worksheet

Today's date: 9/21/20

QC Received by Heidi

Practice/Physician: Dr. Sims

Office contact: N/A

Patient name: N/A

Scan date: 7/16/20 – 8/19/20

Reviewed by Todd

Response is made: _____

7 patients

Concerns:

"Hi Todd,

I really hate to bring up questions about changes in plaque, but I am seeing a number of patients with large changes in echogenic plaque in the bulb, where it would likely have been measured accurately both times. I have not seen this in past years.

Those patients are:

1. G.D. dob 5/25/48 tested 8/5/20 with echogenic plaque of 1.5 last time, and 2.6mm a year later.
2. R.M dob 3/28/64 tested 8/5/20 with 1.1 to 1.8mm appearance of echogenic plaque in the bulb, in one year.
3. D.C. dob 10/17/51 tested 8/19/20 with echogenic plaque of 2.5 last time, and 1.8 this time, in the bulb.
4. S.E. dob 3/1/61 tested 7/28/20 with 0.8mm last year, and 1.5mm echogenic plaque this year, on strong treatment.
5. R.D. dob 1/28/62 tested 8/18/20 with echogenic/heterogeneous plaque change from 1.3 to 2.1 in the left bulb, in one year, compliant w treatment.
6. G.S. dob 2/2/63, tested 8/4/20 with 2.0 to 2.6 mm change in echogenic plaque in right bulb, in one year.
7. T.M dob 3/21/53 tested 7/16/20 with 1.9 to 3.1mm heterogeneous plaque change, in the bulb, in one year, on very strong treatment and lifestyle efforts. (This last one was the subject of a prior email to you in August).

CardioRisk™ Scan Patient Results

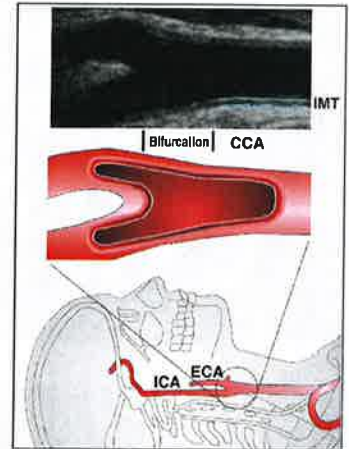
Patient Name: **DELGADO, GILBERT**
 Gender: **M**
 Date of Exam: **8/5/2020**
 Date of Birth: **5/25/1948**
 Referring Provider: **STEPHEN SIMS**

Patient Age	72	Patient IMT	0.63 mm
Arterial Age	47	Normal IMT	<.50 mm

CV Event Risk

All measurements in mm

Test Criteria:	Normal	Moderate	High	Last Visit (2019) [†]	Alert Value*
Early Event Risk**	2.6			1.9	3
Average CCA Mean IMT	0.63			0.65	0.73
Average CCA Max Region	0.73			0.77	0.75
Plaque Burden**			4.7	3.4	



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 2.6 E; Internal Carotid .5
Left CCA .6; Bulb 2.1 E; Internal Carotid .6
Doppler was used bilaterally.

Comments from 6/17/2019 Scan

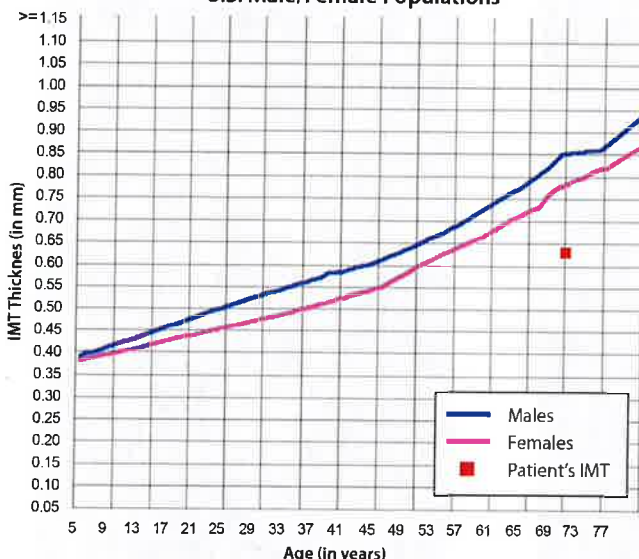
Right CCA .8; Bulb 1.5 E; Internal Carotid .7
Left CCA .8; Bulb 1.9 E; Internal Carotid .7
Doppler was used bilaterally.

2020 Tech: Jason

2019 Tech: Deana

- ** 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 Baldassero 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 were 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.



CardioRisk Laboratories

At the Heart of Good Health

CardioRisk™ Scan Patient Results

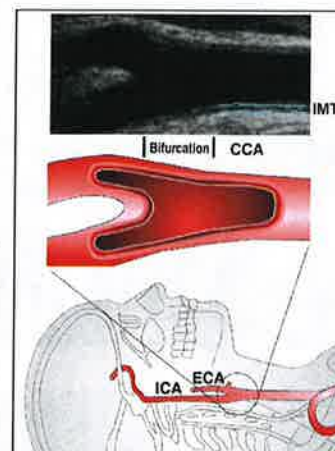
Patient Name: MYERS, RICHARD
 Gender: M
 Date of Exam: 8/5/2020
 Date of Birth: 3/28/1964
 Referring Provider: STEPHEN SIMS

Patient Age	56	Patient IMT	0.65 mm
Arterial Age	50	Normal IMT	<.50 mm

CV Event Risk

All measurements in mm

Test Criteria:	Normal	Moderate	High	Last Visit (2019)*	Alert Value*
Early Event Risk **	1.8			1.3	2
Average CCA Mean IMT	0.65			0.69	0.73
Average CCA Max Region		0.78		0.81	0.75
Plaque Burden**			3.2	1.3	



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 1.2; Internal Carotid 1.4 E
 Left CCA .8; Bulb 1.8 E; Internal Carotid .6
 Doppler was used bilaterally.

Comments from 7/17/2019 Scan

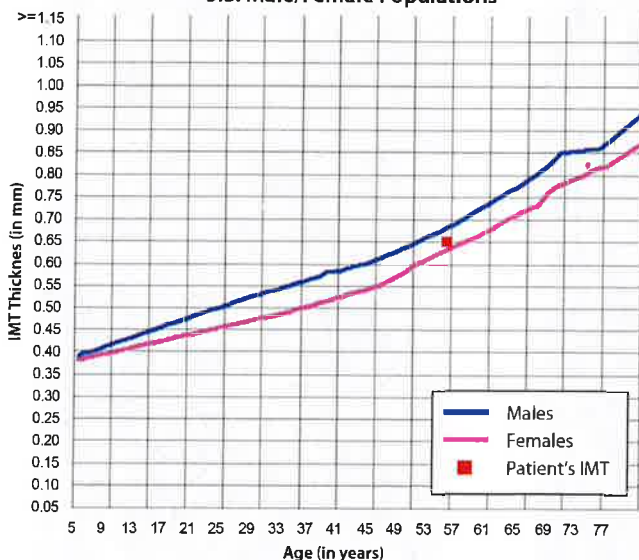
Right CCA .8; Bulb 1.1; Internal Carotid 1.3 E
 Left CCA .8; Bulb 1.1; Internal Carotid .6
 Doppler was used bilaterally.

2020 Tech: Jason

2019 Tech: Deana

- ++ 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.



CardioRisk Laboratories
 At the Heart of Good Health

CardioRisk™ Scan Patient Results

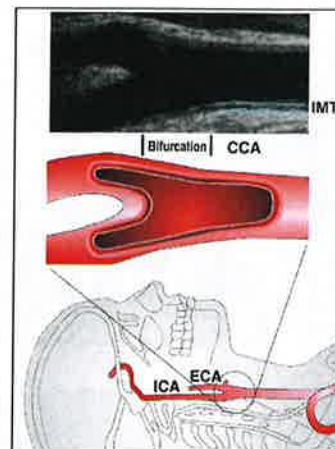
Patient Name: **CONKEY, DENIS**
 Gender: **M**
 Date of Exam: **8/19/2020**
 Date of Birth: **10/17/1951**
 Referring Provider: **STEPHEN SIMS**

Patient Age	68	Patient IMT	0.92 mm
Arterial Age	78	Normal IMT	<.50 mm

CV Event Risk

All measurements in mm

Test Criteria:	Normal	Moderate	High	Last Visit (2019)*	Alert Value*
Early Event Risk**	2.4			3.1	2.5
Average CCA Mean IMT			0.92	0.85	0.73
Average CCA Max Region			1.08	0.97	0.75
Plaque Burden**			8.2	9.4	



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 1.2; Bulb 1.6 E; Internal Carotid 2.4 E
Left CCA 1.1; Bulb 1.8 E; Internal Carotid 2.4 E
Doppler was used bilaterally.

Comments from 6/17/2019 Scan

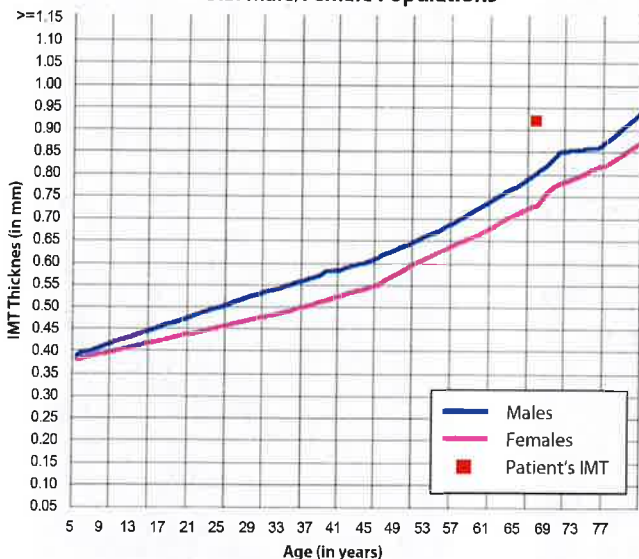
Right CCA 1.0; Bulb 1.5 H; Internal Carotid 2.3 E
Left CCA .9; Bulb 2.5 E; Internal Carotid 3.1 E
RCFA .9; LCFA .9
Doppler was used bilaterally.

2020 Tech: Jason

2019 Tech: Deana

- ** 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.



CardioRisk Laboratories

At the Heart of Good Health

CardioRisk™ Scan Patient Results

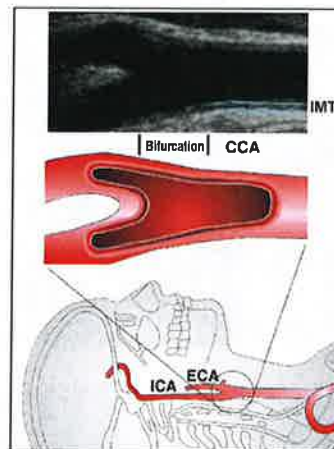
Patient Name: **EMERY, SCOTT**
 Gender: **M**
 Date of Exam: **7/28/2020**
 Date of Birth: **3/1/1961**
 Referring Provider: **STEPHEN SIMS**

Patient Age	59	Patient IMT	0.61 mm
Arterial Age	45	Normal IMT	<.50 mm

CV Event Risk

All measurements in mm

Test Criteria:	Normal	Moderate	High	Last Visit (2019)*	Alert Value*
Early Event Risk**	1.5			1.9	2
Average CCA Mean IMT	0.61			0.53	0.73
Average CCA Max Region	0.71			0.62	0.75
Plaque Burden**			3.0	1.9	



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 .6; Bulb 1.5 E; Internal Carotid .8
Left CCA .8; Bulb .8; Internal Carotid 1.5 E
Doppler was used bilaterally.

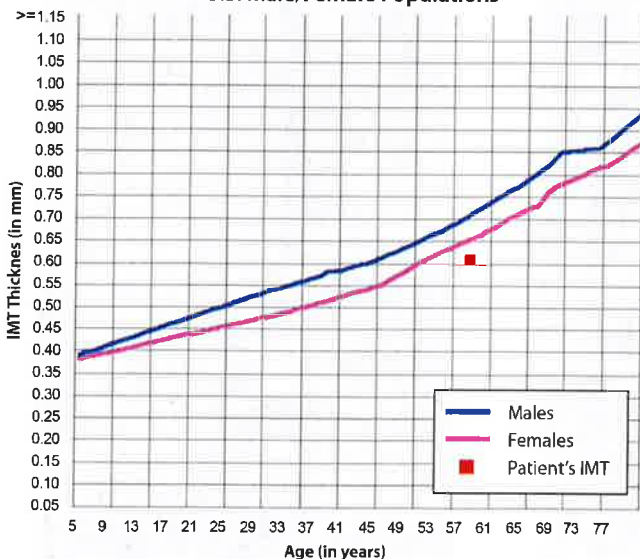
Comments from 6/17/2019 Scan
Right CCA .5; Bulb .8; Internal Carotid .5
Left CCA .7; Bulb .7; Internal Carotid 1.9 E
Doppler was used bilaterally.

2020 Tech: Jason

2019 Tech: Deana

- ++ 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.



CardioRisk Laboratories
 At the Heart of Good Health

CardioRisk™ Scan Patient Results

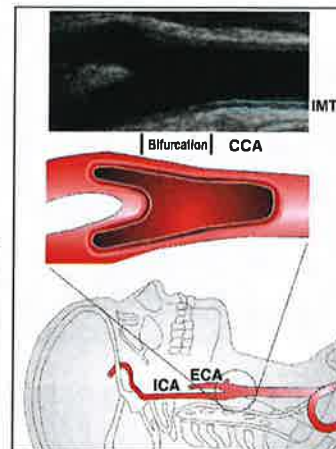
Patient Name: **DUGAN, ROBERT**
 Gender: **M**
 Date of Exam: **8/18/2020**
 Date of Birth: **1/28/1962**
 Referring Provider: **STEPHEN SIMS**

Patient Age	58	Patient IMT	0.95 mm
Arterial Age	>80	Normal IMT	<.50 mm

CV Event Risk

All measurements in mm

Test Criteria:	Normal	Moderate	High	Last Visit (2019) [†]	Alert Value*
Early Event Risk**			2.1	1.3	2
Average CCA Mean IMT			0.95	1.00	0.73
Average CCA Max Region			1.17	1.14	0.75
Plaque Burden**			4.7	3.9	



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 1.3 H; Bulb 1.3 H Internal Carotid 1.1
Left CCA 1.1; Bulb 2.1 H; Internal Carotid 1.1
Doppler was used bilaterally.

Comments from 7/16/2019 Scan

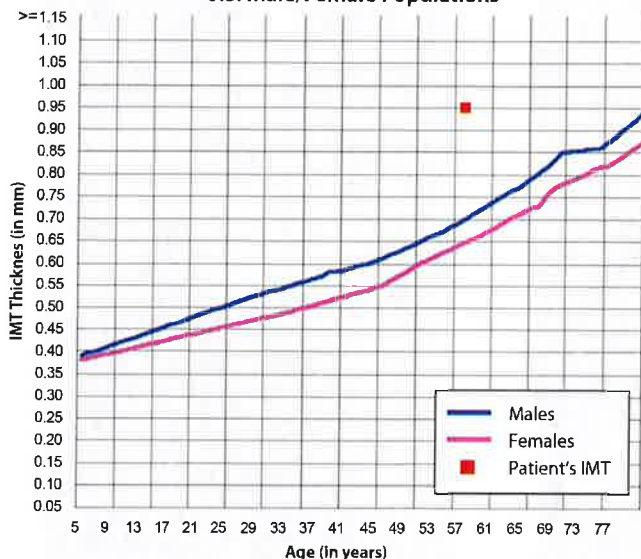
Right CCA 1.3 H; Bulb 1.3 H; Internal Carotid 1.1
Left CCA 1.1; Bulb 1.3 E; Internal Carotid 1.1
Doppler was used bilaterally.

2020 Tech: Jason

2019 Tech: Deana

- ++ 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.



CardioRisk Laboratories
 At the Heart of Good Health

CardioRisk™ Scan Patient Results

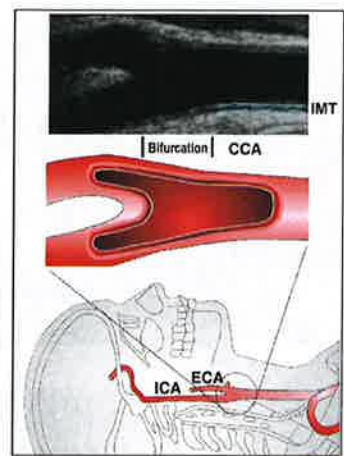
Patient Name: **SCHERER, GERHARD**
 Gender: **M**
 Date of Exam: **8/4/2020**
 Date of Birth: **2/2/1963**
 Referring Provider: **STEPHEN SIMS**

Patient Age	57	Patient IMT	0.67 mm
Arterial Age	52	Normal IMT	<.50 mm

CV Event Risk

All measurements in mm

Test Criteria:	Normal	Moderate	High	Last Visit (2019)*	Alert Value*
Early Event Risk**			2.6	2.5	2
Average CCA Mean IMT	0.67			0.73	0.73
Average CCA Max Region		0.82		0.83	0.75
Plaque Burden**			6.5	6.2	



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 1.0; Bulb 2.6 E; Internal Carotid .6
Left CCA .7; Bulb 2.2 H; Internal Carotid 1.7 H
Doppler was used bilaterally.

Comments from 4/16/2019 Scan

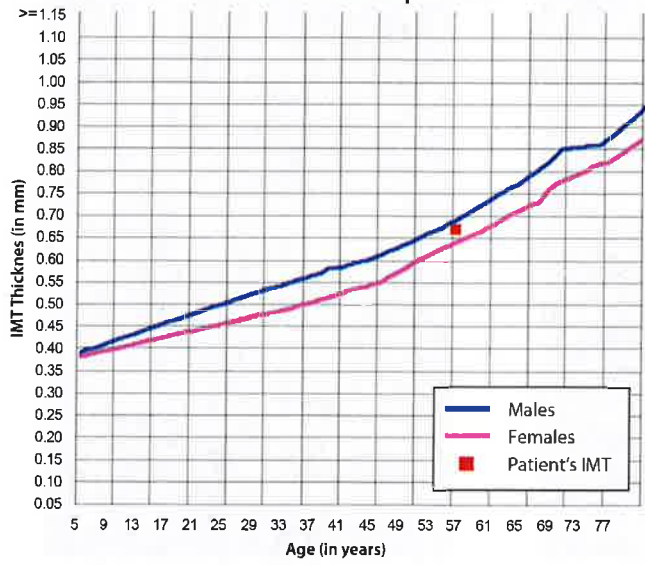
Right CCA .9; Bulb 2.0 E; Internal Carotid .9
Left CCA .7; Bulb 2.5 H; Internal Carotid 1.7 H
Doppler was used bilaterally.

2020 Tech: Jason

2019 Tech: Todd

- ** 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 Baldassarre 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.



CardioRisk Laboratories
 At the Heart of Good Health

CardioRiskTM Scan Patient Results

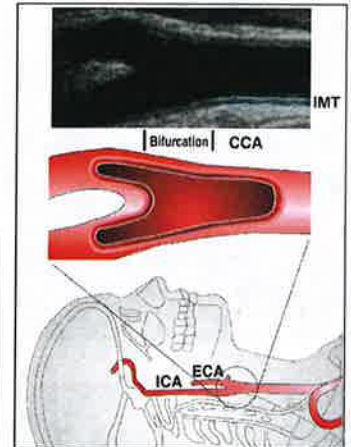
Patient Name: **MACALL, THOMAS**
 Gender: **M**
 Date of Exam: **7/16/2020**
 Date of Birth: **3/21/1953**
 Referring Provider: **STEPHEN SIMS**

Patient Age	67	Patient IMT	1.06 mm
Arterial Age	>80	Normal IMT	<.50 mm

CV Event Risk

All measurements in mm

Test Criteria:	Normal	Moderate	High	Last Visit (2019) [†]	Alert Value*
Early Event Risk**			3.8	3.2	2.5
Average CCA Mean IMT			1.06	1.07	0.73
Average CCA Max Region			1.18	1.24	0.75
Plaque Burden**			14.7	12.4	



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 1.6 H; Bulb 2.0 E; Internal Carotid 2.9 E
 Left CCA 1.3 H; Bulb 3.1 H; Internal Carotid 3.8 H
 Doppler was used bilaterally. Carotid Stenosis > 50% possible.
 Complete Doppler Flow study may be considered if clinically indicated.

Comments from 6/17/2019 Scan

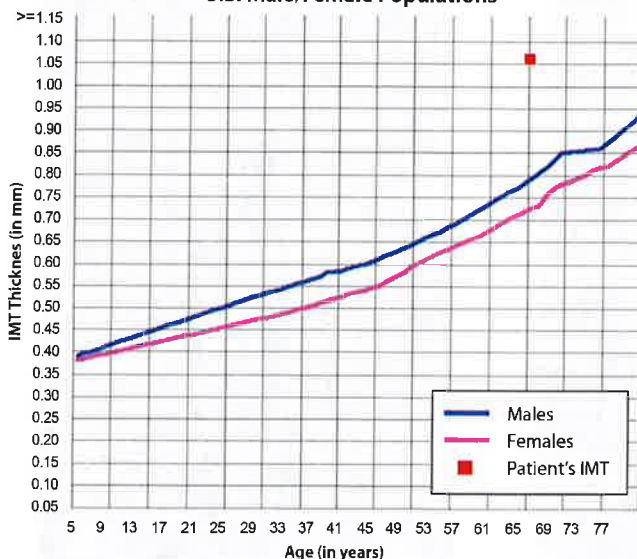
Right CCA 1.6 H; Bulb 2.1 H; Internal Carotid 3.2 E
 Left CCA 1.3 H; Bulb 1.9 H; Internal Carotid 2.3 E
 Doppler was used bilaterally.

2020 Tech: Jason

2019 Tech: Deana

- †† 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 AgeTM: The mean distal 1 cm common carotid artery (CCA) IMT measured looks like the average age 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.



CardioRisk Laboratories

At the Heart of Good Health