

3209 NW Expressway Oklahoma City, OK 73112 Phone: (405) 242-1400

www.advancedbodyscan.com

Patient ID	Age	16 1	
Name	Sex	• 7	
Exam Date	Scored By		r.
Birth Date			

Important Information About Your Scan

Calcium deposits correlate directly to the amount of coronary plaque, and to the risk of future coronary disease. A low score suggests a low likelihood of coronary artery disease, but does not exclude the possibility of significant coronary artery narrowing. The results should be discussed with your physician taking into account other risk factors such as age, gender, family history, diabetes, smoking or high cholesterol levels.

Should a pacemaker, stent and/or bypass be present at the time of this scan, the artifact produced by any one or all of these may directly affect the ability to give an absolute total calcium score.

Score Summary

Your total calcium score is 984.

Ranking Guide

Your score of 984 places you in the 60 th percentile rank. That means 40 percent of the male at the ages greater than 75 will have a higher calcium score than you.

Calcium Score

0 - 0:	No Plaque Burden
1 - 10:	Minimal Plaque Burden
11 - 100:	Mild Plaque Burden
101 - 400:	Moderate Plaque Burden
Greater than 401:	Extensive Plaque Burden

CORONARY	AJ-130	
(LMA) Left Main Artery	23	
(LAD) Left Anterior Descending	436	
(LCX) Left Circumflex	235	
(RCA) Right Coronary Artery	290	
(PDA) Posterior Descending Artery	0	
Total	. 984	
Total (without additional vessels)	984	

Calibration Factor: 0.743



Advanced Body Scan 3209 NW Expressway Oklahoma City. OK 73112 ph (405) 242-1400

Patient Name: MRN: Date of Birth: CT LUNGS Exam:

Study Performed At: Advanced Body Scan **Study Ordered By:** ABS

FINAL REPORT

Date of Exam:

TECHNIQUE: Low-dose helical noncontrast CT images were acquired of the chest. A separate gated helical acquisition was performed of the heart for calcium scoring. Calcium scoring was performed using dedicated software on a post processing station using the Agatston method. A separate detailed calcium scoring report will be provided. Multiple dose reduction strategies were utilized, including iterative reconstruction, organ and 3D dose modulation.

DLP: 90.07

CLINICAL INFORMATION: Screening exam.

COMPARISON:

FINDINGS:

Lungs and Airways: No suspicious nodules or other concerning findings in the lungs. The central airways are widely patent.

Pleural spaces: No pneumothorax or pleural effusion. No focal thickening or calcification of the pleura.

Heart and mediastinum: The visualized thyroid gland has a normal non-contrast appearance. No lymphadenopathy in the imaged mediastinum. The heart is overall normal in size and without pericardial effusion. The thoracic aorta and great vessels are normal in caliber. No significant systemic vascular calcifications. The appearance of the esophagus is within normal limits for age.

Bones and soft tissues: Bone mineralization appears within normal limits for age. Mild degenerative changes of the thoracic spine. The soft tissues show no concerning abnormalities. (For female patients - please note CT is not as sensitive for the detection of breast cancer as mammography and should not be a substitute for your dedicated breast cancer screening.)

IMPRESSION:

A detailed calcium scoring report will be submitted separately.

No suspicious pulmonary nodules.

Remainder of the exam shows no concerning findings.

Dictating Radiologist: Sparks, Anthony 04/03/2019 13:07 Transcribed By: Electronically Signed By: Sparks, Anthony 04/03/2019 13:07



CORONARY ARTERY SCANNING GENERAL INFORMATION

- 1) Coronary Artery Scanning is a diagnostic procedure designed to detect and measure calcium within the coronary arteries (the blood vessels that bring blood and oxygen to the heart muscle).
- 2) The presence of calcium within the coronary arteries means that the process of coronary atherosclerosis (plaque accumulation within these vessels) is present.
- 3) The presence of plaque is typical in individuals as they age. Accordingly, the fact that some plaque is detected in a Coronary Artery Scan is not a reason to panic nor is it necessarily an indication that medication or surgery is needed.
- 4) The higher the calcium score, the greater the extent of the plaque accumulation.
- 5) In general, the greater the extent of plaque accumulation, the more aggressive the recommended therapy.
- 6) Calcium scores are computed for each of the four main coronary arteries:

LMCA = Left Main coronary artery

- LAD = Left Anterior Descending coronary artery
- **CX** = Circumflex coronary artery
- **RCA** = Right coronary artery
- 7) Total calcium scores are classified as follows:

ZERO (negative scan) No identifiable atherosclerotic plaque

A negative scan is the best possible test result. It means that no calcium was found in the coronary arteries. Accordingly, it is highly unlikely that the patient has a significant (greater than 50%) coronary artery narrowing. **A negative test result does not guarantee that the patient will never experience any cardiac problems**, it should prove greatly comforting that advanced atherosclerotic plaque is not yet present. However, if the symptom of chest discomfort occurs, do not ignore or procrastinate. See your doctor. Patients with negative scans should, of course, understand that this excellent test result does not provide a license for irresponsible behavior with respect to diet, exercise, smoking, weight, blood pressure and cholesterol control, etc. Adopting and/or maintaining excellent health habits increase the likelihood that the coronary arteries will remain "clean" for as long as possible.

1 to 10 Minimal plaque burden

Small amounts of calcified plaque have been found in the coronary arteries, which mean that the disease process has begun. This is not a reason to panic. While it should always be the goal to stabilize or reverse this disease process, the reality is that slowing its progression and preventing it from reaching an excessive level is often sufficient to allow one to live a long and healthy life free of cardiac problems. Patients with this level of disease are advised to consult with their physician to develop a risk modification program to include adopting a low-fat diet, cardiovascular exercise, stress management and smoking cessation programs, and achieving optimal weight, blood pressure and cholesterol levels. In addition, aspirin therapy should be considered.

11 to 100 Mild plaque burden

Scores in this range indicate that mild atherosclerotic plaques are present. The likelihood that significant coronary disease is present is low. Active risk factor modification in these patients is critical to prevent the disease from progressing to a more advanced state. In addition to general public health guidelines for prevention of cardiovascular disease (adopting a low-fat diet, cardiovascular exercise, stress management, and smoking cessation programs), strict adherence to National Cholesterol Education Program guidelines for cholesterol-lowering should be followed (total cholesterol should be reduced to less than 200mg/dl and LDL cholesterol should be reduced to less than 130mg/dl). In addition, aspirin therapy should be considered.

101 to 400 Moderate plaque burden

Scores in this range indicate the likely presence of moderate non-obstructive coronary stenosis (narrowing). Very aggressive risk factor management in a physician-supervised program is strongly recommended. In addition to general public health guidelines for prevention of cardiovascular disease (adopting a low-fat diet, cardiovascular exercise, stress management and smoking cessation programs), strict adherence to National Cholesterol Education Program guidelines for cholesterol-lowering should be followed (total cholesterol should be reduced to less than 200 ml/dl and LDL cholesterol should be reduced to less than 130mg/dl). In addition, aspirin therapy and exercise testing to rule out ischemia should be considered.

Above 400 Extensive plaque burden

Scores in this range indicate the presence of advanced atherosclerosis. There is a high likelihood of the presence of at least one coronary stenosis (narrowing) greater than 50%, and the patient is at a high risk of having an acute coronary event or developing symptomatic heart (adopting a low-fat diet, cardiovascular exercise, stress management and smoking cessation programs), strict adherence to National Cholesterol Education Program guidelines for patients with established coronary artery disease should be followed (LDL cholesterol should be reduced to less than 100 mg/dl). In addition, stress testing with either nuclear imaging or echocardiography to rule out ischemia should be strongly considered, as should the institution of aspirin therapy.

- 8) Recommended clinical action for each individual takes into consideration both the absolute score as indicated above, and how the individual's score compares to the scores of other individuals of the same age and gender. In general, persons who score in the 75th percentile or higher for their age and gender will receive a recommendation for more aggressive action than if their score was below the 75th percentile.
- 9) The following information, which is also included in your report, may provide your physician with additional insight into the nature of your disease (if any):

a) Mean CT Density – indicates the average density of calcium found within each artery. In general, higher the density, the older the lesion and therefore the longer time period heart disease has been present.

b) Calcium Volume – measures the volume of calcified plaque in cubic millimeters. This is proportional to the total amount of atherosclerotic plaque contained within the vessel.

10) The individual receives the greatest benefit when test results are placed in the context of his/her entire medical profile. Accordingly, it is strongly recommended that these test results be shared with your physician.

Above 1000

Scores in this range have high incidence of multi vessel significant blockage. Cardiologist strongly recommended being involved with care.

ACCURACY: Numerous papers have been published in major medical journals attesting to the accuracy of Electron Beam CT Coronary Artery scanning. Perhaps the most widely quoted statistic is the approximate 95% reliability of this procedure in ruling out obstructive coronary artery disease. This means that a negative scan (no coronary calcium) indicated with 95% reliability that the individual does not have a significant coronary artery obstruction. It should be noted that the older the individual, the higher the degree of reliability of a negative scan.

SOFT PLAQUE: It is **IMPORTANT** to understand that before a plaque becomes a hard calcified shell that is identified and counted as a calcium score value, it first originates within the arterial wall as "soft", spongy material that is *not* identified or counted by the scanner as calcium. "Soft plaque" may be significantly present beneath the harder calcium plaque. This could give a "false sense of security" that a minimal or relatively low calcium score is totally safe, and that modification of life style, risk factors and treatment programs are not important. A "zero", minimal or mild plaque burden or calcium score can serve as an extremely important reference point to treat the course of coronary artery disease. It does not imply that a coronary event won't occur. As the calcium score increases, the possibility of experiencing a cardiac event increases. Therefore, your initial test creates your personal "baseline". In the event of any calcium deposit it is recommended to follow up with an additional calcium test *within one year* to determine any trend or progress of disease.