

FDA Breakthrough Designation: AI-CAC™ Automated Cardiac Chambers Volumetry

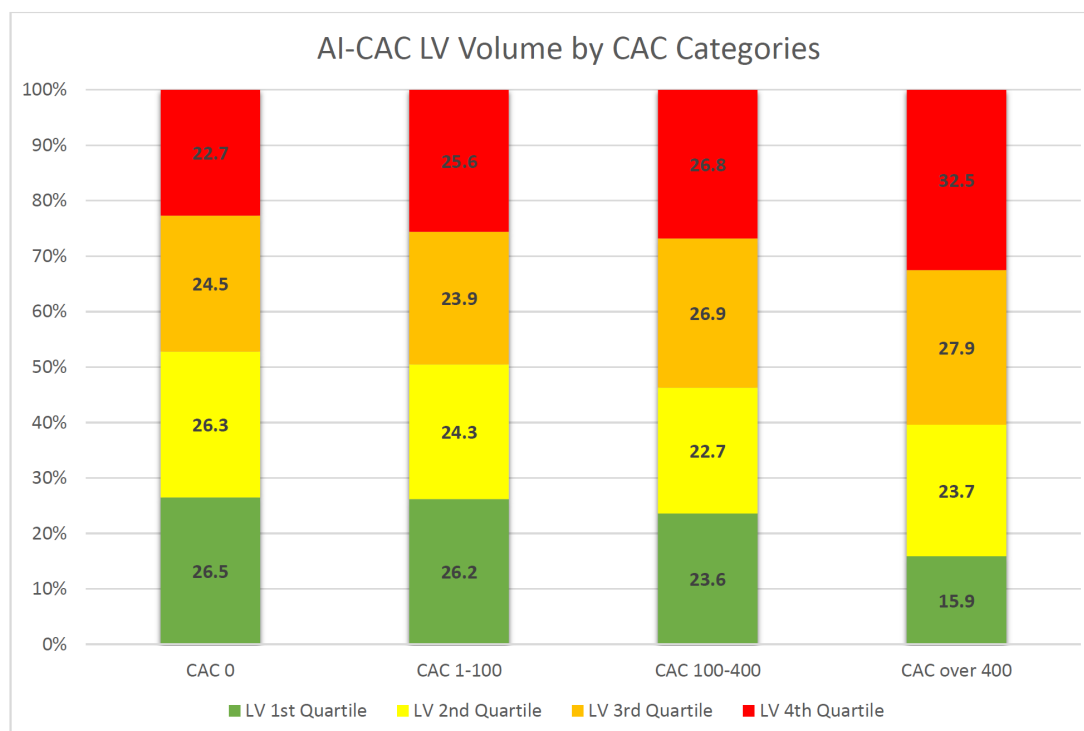
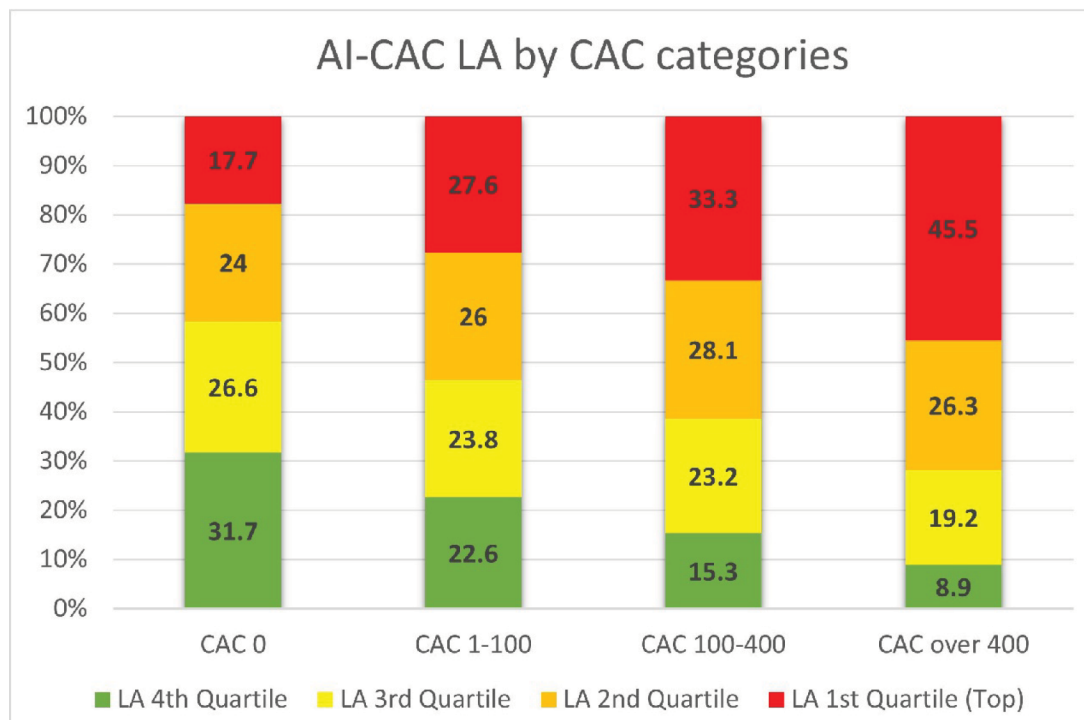


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HeartLung Received FDA Breakthrough Designation

AI-CAC™ Saves Lives

AI-CAC™ Automated Cardiac Chambers Volumetry and LV Wall Mass Measurement as an Add-on to CAC Scans

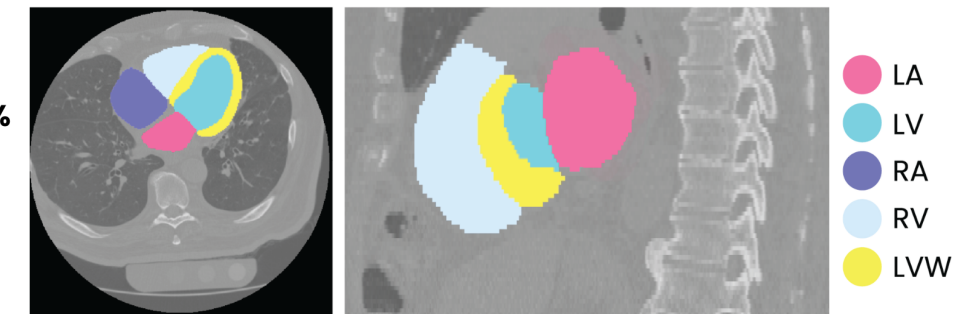


Case Example 1

Female
Age: 57
CAC Score: 0
10-Year ASCVD Risk: 1.4%
(Low Risk)

LA Volume (cc): 84.6
LV Volume (cc): 121.7
CTR: 0.5

This case developed HF and AFib

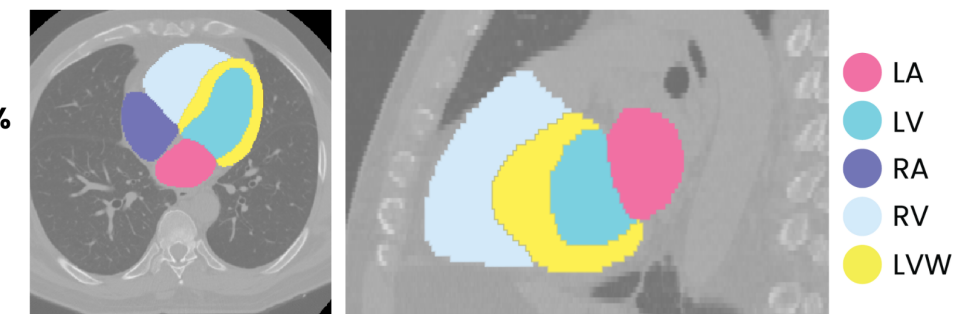


Case Example 2

Male
Age: 55
CAC Score: 0
10-year ASCVD Risk: 4.8%
(Low Risk)

LA-Volume (cc): 82.2
LV-Volume (cc): 132.5
CTR: 0.48

This case developed HF.

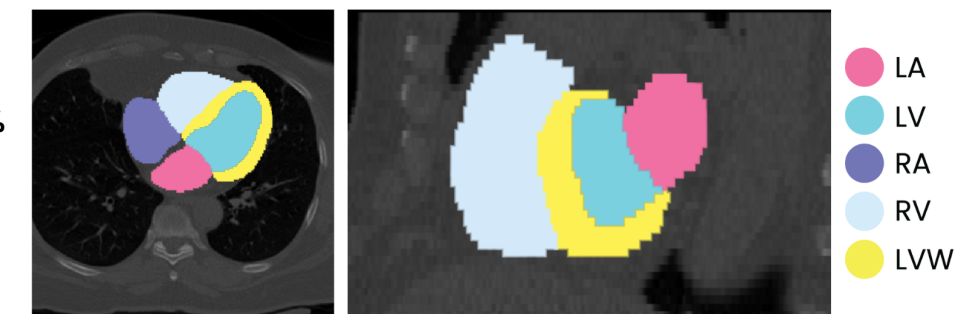


Case Example 3

Female
Age: 60
CAC: 0
10-year ASCVD Risk: 4.1%
(Low Risk)

LA Volume (cc): 76.2
LV Volume (cc): 117.1
CTR: 0.49

This case developed Afib and stroke.



Abbreviations & Definitions

ASCVD	Atherosclerotic cardiovascular disease	LV	Left Ventricle
CAC	Coronary Artery Calcium	LVW	Left Ventricular Wall
CTR	Cardiothoracic Ratio	RA	Right Atrium
LA	Left Atrium	RV	Right Ventricle

All cases above were categorized as low risk for ASCVD and related catastrophic events due to low CAC scores. Running AI-CAC™ on their CAC scans could've saved their lives.

AI-CAC™: Advancing Coronary Artery Calcium (CAC) Scan with AI

How to Order AI-CAC™? AI-CAC™ for Diagnostic Imaging Centers

AI-Enabled Comprehensive Cardiac CT Scan Report AI-CAC

Patient Name: Doe, Jack
 ID: 9008
 Date of Exam: 2/16/2023
 Date of Birth: 1/1/1953
 Gender: Male

Your Clinic's Logo Here

AutoChamber™
 Powered by HeartLung
 To learn more visit www.HeartLung.ai

Summary
 Your CACplus report includes your coronary artery calcium (CAC) score which is an indicator of hidden coronary artery disease leading to heart attacks, as well as your risk of future heart failure, atrial fibrillation, and stroke. These 10-year risk estimates are calculated using CAC score, cardiac chamber volumes, bone mineral density, and multiple risk factors such as age and gender. A new artificial intelligence (AI) based software read your CT scan images and generated the reports which were later reviewed and approved by a radiologist. For more information about each component of the CACplus Summary Report please see the enclosed AutoCAC, AutoChamber, and AutoBMD reports.

Your total 10-year risk for experiencing any type of a cardiovascular adverse event is 31%, which is considered very high risk. Your 10-year risk of coronary heart disease (e.g. a heart attack) is 24%, which is considered high risk. Your 10-year risk of heart failure is 18%, which is considered high risk. Your 10-year risk of atrial fibrillation is 36%, which is considered high risk. Your 10-year risk of stroke is 11%, which is considered intermediate risk. Your 10-year risk of osteoporotic fracture is 22%, which is considered high risk.

Follow-up
 We strongly recommend that you consult with your primary care physician or cardiologist regarding this report. Your physician may recommend electrocardiogram, echocardiogram, cardiac MRI, or other advanced diagnostic tests for further evaluation. Alternatively, your physician may wish to initiate medical therapy as soon as possible because you are in the high-risk category. Your care provider may also recommend a repeat CACplus within a certain time interval (e.g., 3-5 years depending on other risk factors).

Your 10-Year Risk Report

- Your Total 10-year Risk of **All Cardiovascular Events**: 25% (High Risk)
- Your Total 10-year Risk of **Coronary Heart Disease**: 21% (High Risk)
- Your Total 10-year Risk of **Heart Failure**: 11% (Intermediate Risk)
- Your 10 year risk of **Atrial Fibrillation**: 18% (Borderline Risk)
- Your 10 year risk of **Stroke**: 7% (Borderline Risk)
- Your 10 year risk of **Major Osteoporotic Fracture**: 9% (Low Risk)

AutoCAC™ AutoChamber™ AutoBMD™

Electronically signed by: Thomas Atlas, MD 1

Step 1: Set up your HeartLung Provider account in less than 5 minutes

Step 2: Install HeartLung Gateway to send scans to cloud automatically

Step 3: Access AI-CAC™ Reports in your Provider Portal and opt-in to automatic forwarding reports to patients

GET MORE FROM CAC SCANS THAN A CAC SCORE!

Your Coronary Artery Calcium (CAC) Report

Patient Name: Doe, Jack
 ID: 9008
 Date of Exam: 2/16/2023
 Date of Birth: 1/1/1953
 Gender: Male

Coronary Arteries

Artery	Volume (mm³)
LA	85.1
LV	190.6
RA	68.7
RV	105.8
LV Mass	150.3

CTR: 46%
 Cardio-Thoracic Ratio

LA (Left Atrium)
 LV (Left Ventricle)
 RA (Right Atrium)
 RV (Right Ventricle)
 LWV (Left Ventricle Wall)

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Your Cardiac Chambers Volumetry Report

Patient Name: Doe, Jack
 ID: 9008
 Date of Exam: 2/16/2023
 Date of Birth: 1/1/1953
 Gender: Male

Chamber Volumes

Chamber	Volume (mm³)
LA	85.1
LV	190.6
RA	68.7
RV	105.8
LV Mass	150.3

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Your Bone Mineral Density (BMD) Report

Patient Name: Doe, Jane
 ID: 9009
 Date of Exam: 05/02/2023
 Date of Birth: ***/**/1963
 Gender: Female

Quantitative scale for describing radiodensity

Z-Score
 A quantitative scale for describing radiodensity for a person of the same age and gender.

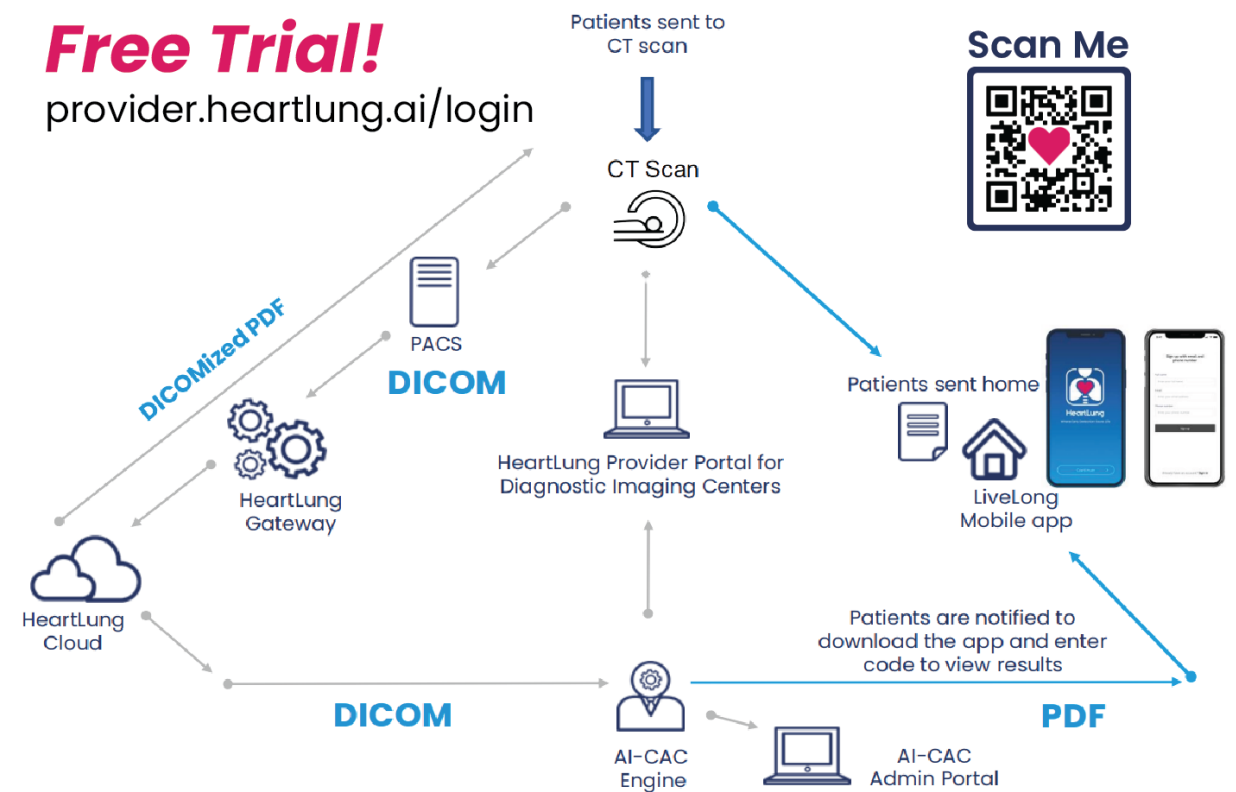
T-Score
 Z-score compares your bone mineral density to what is normally expected in a healthy adult of your gender. Your T-score of -0.9 indicates that your bone mineral density is normal.

Electronically signed by: Thomas Atlas, MD 1

AI-CAC™ Service Workflow

Free Trial!

provider.heartlung.ai/login



AutoCAC™

Automated Coronary Artery Calcium Score

AutoChamber™

Automated Cardiac Chambers Volumetry

AutoBMD™

Automated Bone Mineral Density

All from the same CAC scan that today only reports a CAC score.