

The MyoStrain Report

Simplifying a Comprehensive Report into a Single Metric

Percent Normal Myocardium

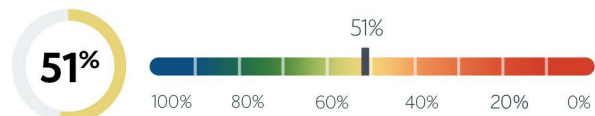
The number of abnormal segments, which is used to calculate the % of normal segments

LV Segments (37/37 Segments Analyzed)

Number of Impaired Segments (> -10%) 5
Number of Abnormal Segments (> -17%) 18

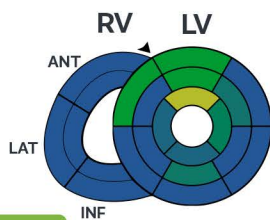
The percent of normal segments is the number of normal LV segments divided by the 37 total LV segments

(% Normal Segments \leq -17%) [1]



Regional MyoStrain Measurements

Longitudinal Strain



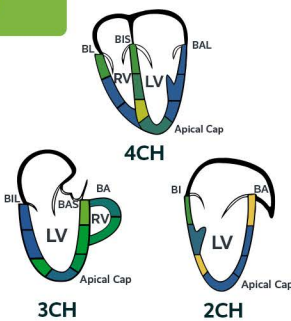
Basal Mid Apical

	Basal	Mid	Apical			
LV	Anterior	-14%	Anterior	-12.8%	Anterior	-8.4%
	Anteroseptal	-15.4%	Anteroseptal	-19.2%	Septal	-17.5%
	Inferoseptal	-19.1%	Inferoseptal	-19.2%	Inferior	-17.7%
	Inferior	-22.2%	Inferior	-16.4%	Lateral	-15.9%
	Inferolateral	-21.4%	Inferolateral	-20.4%		
	Anterolateral	-20.4%	Anterolateral	-16.6%		
RV	Anterior	-19%	Anterior	-18.7%		
	Lateral	-23.1%	Lateral	-22.9%		
	Inferior	-19.1%	Inferior	-19.9%		

Longitudinal strain values are calculated for each segment of the LV & RV

Visual representation of segmental strain values (blue=normal, green=abnormal, yellow=impaired)

Circumferential Strain



3CH 4CH 2CH

	3CH	4CH	2CH			
LV	Basal anterior	-18.8%	Basal inferoseptum	-13.6%	Basal inferior	-13.1%
	Mid inferolateral	-19.4%	Mid inferoseptum	-15.8%	Mid inferior	-17.8%
	Apical lateral	-14.9%	Apical septum	-7.6%	Apical inferior	-5.3%
	Apical cap	-18%	Apical cap	-16.2%	Apical cap	-22.7%
	Apical anterior	-15.6%	Apical lateral	-18.7%	Apical anterior	-25.9%
	Mid anteroseptum	-11.8%	Mid anterolateral	-26.1%	Mid anterior	-23.8%
	Basal anteroseptum	-9.7%	Basal anterolateral	-24.5%	Basal anterior	-6.3%
RV	Basal anterior	-17%	Basal lateral	-12.6%		
	Mid anterior	-15.4%	Mid lateral	-21.1%		
			Inferior lateral	-21.7%		

Circumferential strain values are calculated for each segment of the LV & RV

Abnormal segments (>-17%) are identified in bold

Impaired segments (>-10%) are identified in red

Global MyoStrain Measurements

Strain Measures

Measure	Raw	Normal [2]
LV Global Longitudinal Strain (GLS)	-17%	(<-17)
LV Global Circumferential Strain (GCS)	-16.5%	(<-17)
RV Global Longitudinal Strain (GLS)	-20.4%	(<-17)
RV Global Circumferential Strain (GCS)	-17.3%	(<-17)

Global strain data for the RV & LV

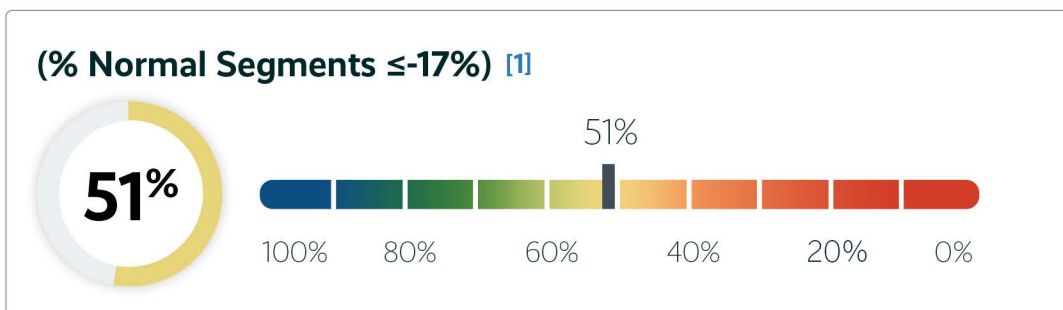
Traditional Measures

Measure	Raw	Index	Normal [3]
LVEF	59.5%	--	(53-74)
LV Mass	85.5 g	48.03	(39-75)
LVED Volume	153.3 ml	86.12	(53-99)
LVES Volume	62 ml	34.83	(15-40)
LV Stroke Volume	91.3 ml	51.29	(35-63)

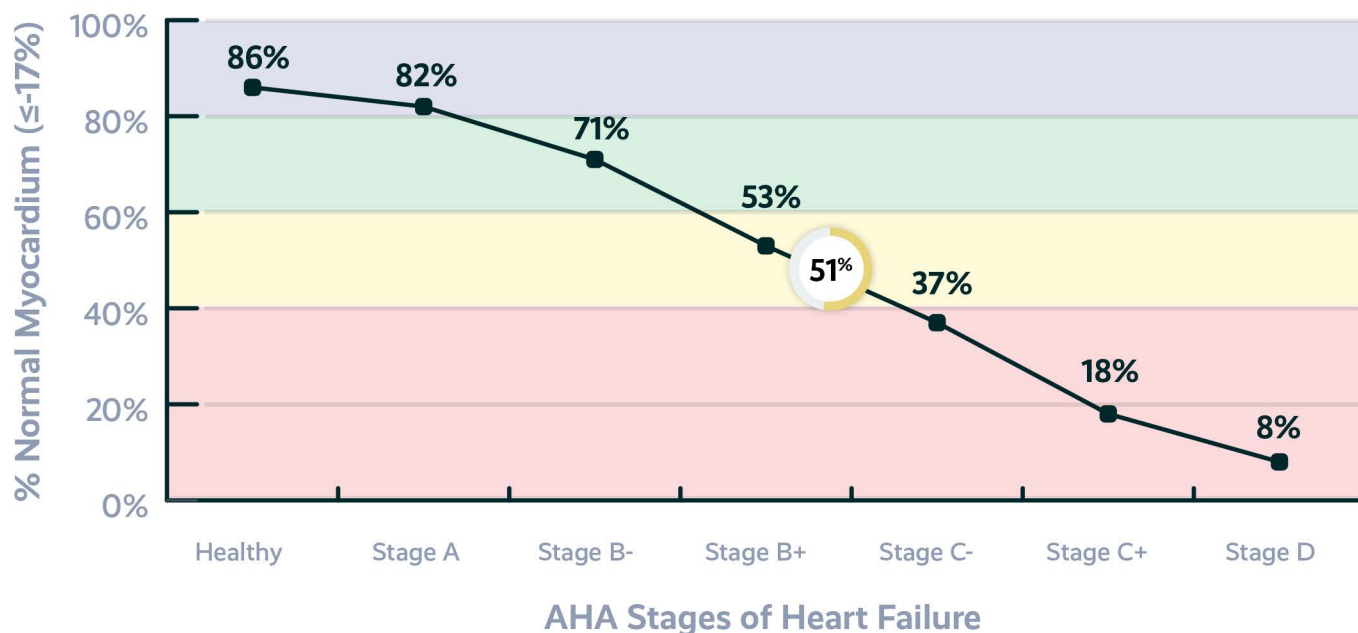
Traditional metrics for evaluating cardiac function

About the Report

The MyoStrain report provides a single, standardized metric based on the percentage of normal myocardial segments.¹



This unique standardized metric can be plotted on MyoStrain's progressive dysfunction curve to help physicians understand the patient's heart function and monitor the patient's progression over time.^{2,3}



REFERENCES

1. Neizel M, et al. *Circ Cardiovasc Imaging*. 2009;2(2): 116-122 2. Y. Zhan et al., *Journal of Cardiovascular Magnetic Resonance*, vol. 18, n. 1, p. O75, 2016/01/27 2016 3. Montenbruck M, et al. Fast-SENC segmental intra-myocardial LV strain detects heart disease progression based on ACC/AHA Heart Failure Stage before longitudinal strain or ejection fraction [abstract]. In: Poster Session 1 of European Society of Cardiology Congress; 2019 Aug 31–Sept 4; Paris, France. ESCC; 2020. Abstract nr P600.