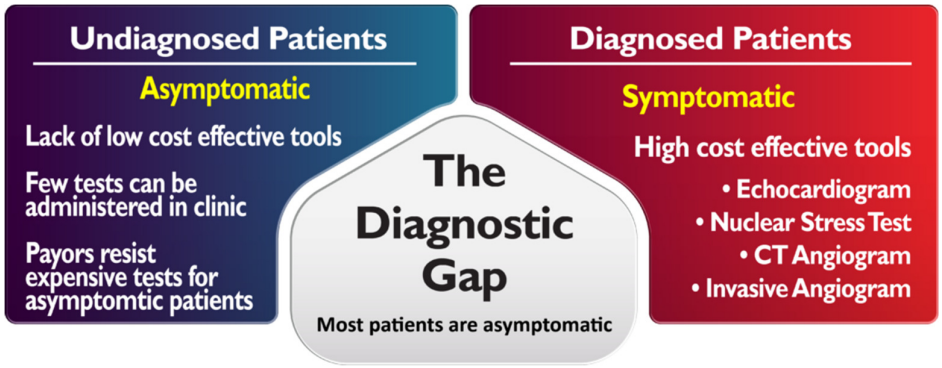
MyoVista®

The Power of Wavelet Signal Processing

High Sensitivity wavECG™

Breakthrough Technology for the Early Detection of Cardiac Dysfunction



USING PATENTED PROPRIETARY TECHNOLOGY, HEARTSCIENCES DEVELOPS MEDICAL DEVICES THAT FOCUS ON THE EARLY DETECTION OF HEART DISEASE. HEART DISEASE KILLS SEVEN MILLION PEOPLE WORLDWIDE EACH YEAR, MORE THAN ALL CANCERS COMBINED, AND IS THE COSTLIEST DISEASE STATE IN HEALTHCARE. HEARTSCIENCES SEEKS TO BRIDGE TODAY'S "DIAGNOSTIC GAP" IN CARDIAC CARE BY PROVIDING FRONT LINE, LOW-COST EFFECTIVE SOLUTIONS TO HELP TO IDENTIFY AT-RISK PATIENTS EARLY - BEFORE EXPERIENCING AN ADVERSE CARDIAC EVENT, SUCH AS A HEART ATTACK – AND PROVIDING CARDIOLOGISTS WITH MORE EFFECTIVE GATEWAY TESTING TOOLS.

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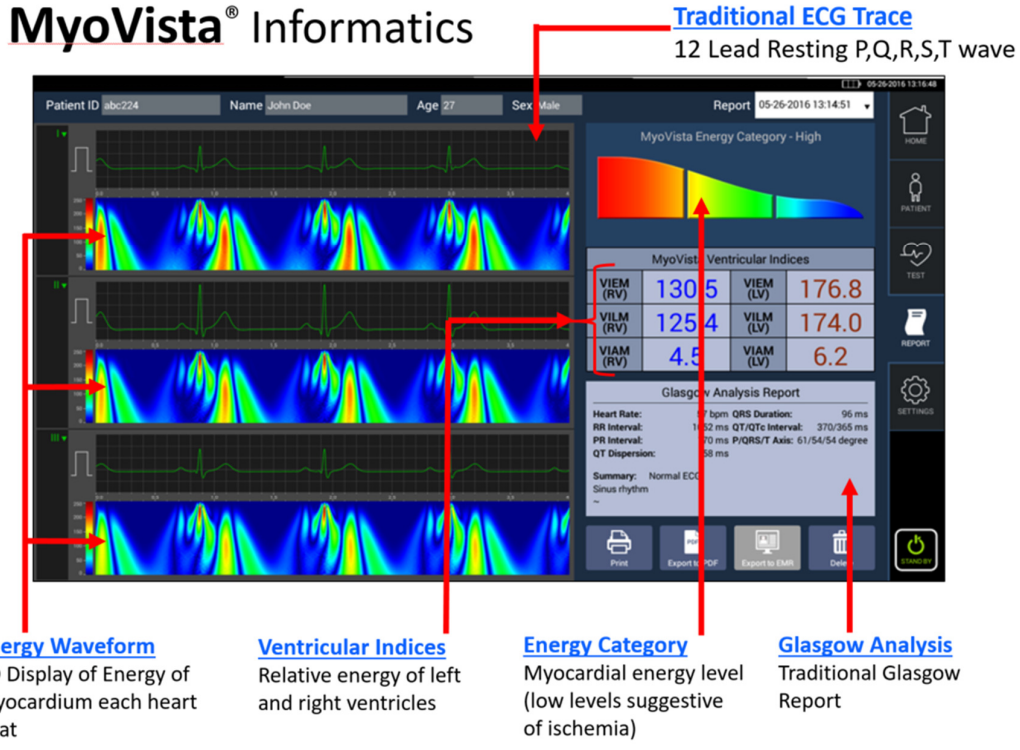
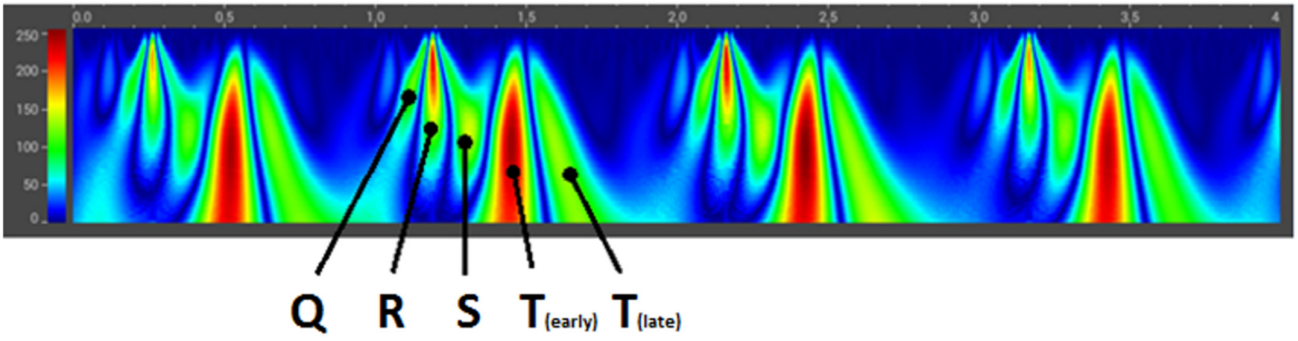
Design | Features | Functions

Intuitive Touch-Screen Tablet
MyoVista wavECG device is an easy to use high definition (1920 x 1080) touch screen tablet with intuitive icons and follows conventional resting 12-lead ECG protocols, thereby minimizing training requirements.

Wavelet Signal Processing Informatics
Easy to interpret, patented informatics provide repolarization measurement to assist in the early detection of heart disease by correlating to diastolic Dysfunction. Diastolic dysfunction is an early indicator for most types of ischemic and structural Heart disease.

Measuring Myocardial Energy
MyoVista technology utilizes continuous wavelet transform based signal processing to measure the heart's energy during each cardiac cycle. Informatics focused on cardiac energy during repolarization provide valuable new information to identify repolarization abnormalities.





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Specifications

MyoVista® Wavelet ECG (*wav*ECG™) Testing Device

Breakthrough Technology for the Early Detection of Cardiac Dysfunction in the Diastolic Phase

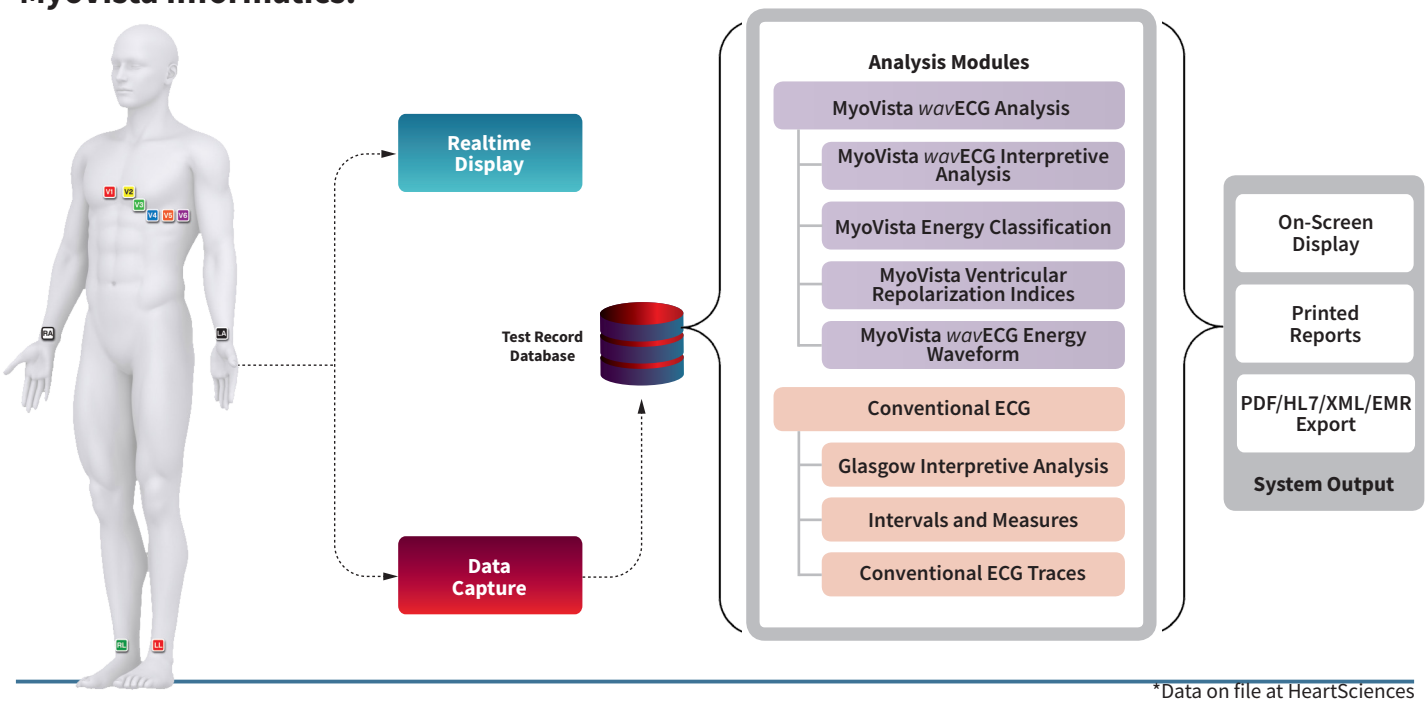
HeartSciences' MyoVista *wav*ECG Testing Device is a resting 12-lead electrocardiograph that incorporates Wavelet Signal Processing and is designed to improve the sensitivity of an ECG for detecting ischemic and structural heart disease.

It's patented advanced wavelet signal processing method measures myocardial energy during the cardiac cycle. New proprietary Informatics focus on cardiac performance and energy during repolarization that provide valuable new data to assist in the detection of cardiac relaxation abnormalities.

MyoVista Testing provides all conventional resting 12-lead ECG information within the same test, at comparable cost, and follows the same lead placement protocol.

- Assists in early detection of electrical, structural, and coronary arterial disease
- Non-invasive
- Easy to perform
- Follows AHA/IEC lead placement protocol
- Includes conventional 12-lead ECG information and Glasgow Interpretive Analysis Report in the same test
- Comprehensive reporting
- Quick: 20/30/60 second test with immediate results
- EMR-EHR capable

MyoVista Informatics:



*Data on file at HeartSciences

Not available in the United States

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MyoVista® Wavelet ECG (*wav*ECG™) Interpretation Guide

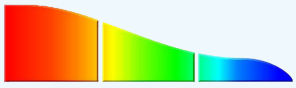
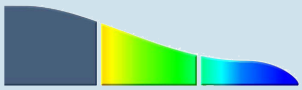
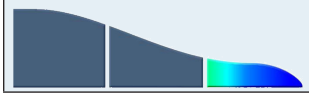
The Clinical Guide below (Table 1) provides instruction for interpreting MyoVista® *wav*ECG™ Informatics and other measures in relation to the detection of Diastolic Dysfunction (DD). HeartSciences performed analysis of clinical data from n=193 patients enrolled during clinical trial (Mount Sanai Hospital, New York, NY). This clinical guide includes results correlated with echocardiographic findings of DD of the left ventricle using e-prime measurements of septal <7 cm/sec or lateral <10 cm/sec. Additional measures are recommended for use during echocardiography determination of DD but are not included as part of MyoVista *wav*ECG test determination for DD.

Based upon the analysis of MyoVista Informatics as well as additional measures, MyoVista Device, in conjunction with the use of Table 1 for interpretation, has a 78% sensitivity and 71% specificity for detecting DD.

Instructions for Interpretation

1. First identify the MyoVista Energy Level, then apply additional Classification Criteria to determine if the patient is “at risk” for DD.
2. Patients in the Normal Repolarization Category may still have DD if they have systolic blood pressure >=140mmHG.
3. Patients in the Normal Repolarization Category above the age of 55 may have age related DD even though the MyoVista Device does not detect repolarization abnormalities.
4. Frontal Plane T-Axis provided a significant statistical correlation in final repolarization classification after energy categorization for patients in the Moderate and Low Energy Categories.

TABLE 1: Interpretation Guide

Energy Category	Repolarization Classification	Classification Criteria	Overall Classification	Notes
High 	Normal	Systolic BP < 140 mmHG AND Age < 55 years	Normal	
		Systolic BP >= 140 mmHG OR Age >= 55 years	Normal*	*Hypertensive-related or age-related DD is possible even when repolarization appears Normal
Moderate 	Borderline	T-Axis <= 5 degrees OR T-Axis >= 30 degrees	Abnormal	
		T-Axis is in range (5, 30 degrees)	Borderline	
Low 	Abnormal	T-Axis <= 5 degrees OR T-Axis >= 30 degrees	Abnormal	
		T-Axis is in range (5, 30 degrees)	Borderline**	**Abnormal Repolarization but patient may or may not have DD (i.e. abnormal repolarization may not be related to DD)

CAUTION: The MyoVista Device provides “muscle noise filtering” capability that reduces higher frequency content to reduce or eliminate muscle noise produced by patients under certain conditions. Bandpass noise filters are designed to attenuate frequencies above the selected frequency. While these filter settings have little to no impact on the conventional 12-lead ECG recording and the Glasgow Interpretive Analysis, MyoVista Informatics are sensitive and depend on processing the composite myocyte activity that is present in the ECG signal to reliably perform MyoVista Informtics computations. For myoelectricity settings of 75Hz or higher, there is no significant impact on MyoVista Informatics. For filter settings at frequencies of 45 Hz or below, MyoVista Informatics performance may be degraded and affect a patient’s test results. When muscle noise is present during patient testing use myoelectricity settings at 100 Hz or 75 Hz. If substantial muscle noise is present and lower filter settings of 45 Hz or below are necessary be aware results may be affected. The 50Hz and 60Hz line filters do not impact MyoVista informatics or conventional ECG recordings.

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