



The Ultimate AI Solution
for Diagnosing **Heart Disease**



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Myomics

Myomics is an advanced AI-powered solution designed to revolutionize the analysis and diagnosis of complex cardiac conditions, including amyloidosis. It generates comprehensive diagnostic reports enriched with critical imaging biomarkers and seamlessly integrates into existing clinical workflows with its innovative zero-click functionality.

By enhancing diagnostic accuracy and reducing manual intervention, Myomics supports health-care providers in making timely and informed treatment decisions. The solution's adaptability to diverse clinical settings, coupled with continuous learning capabilities, ensures it evolves alongside the ever-changing needs of modern medicine.

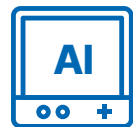
With Myomics, healthcare professionals can deliver patient-centered care with greater efficiency and precision.



Myomics Functionalities

Diagnostic Report

AI-Powered Diagnostic Reporting



First-of-its-kind AI-driven suggestions for major cardiac diseases, enhancing diagnostic accuracy.



Automatically generates comprehensive diagnostic reports and summarizing analyzed cardiac condition.



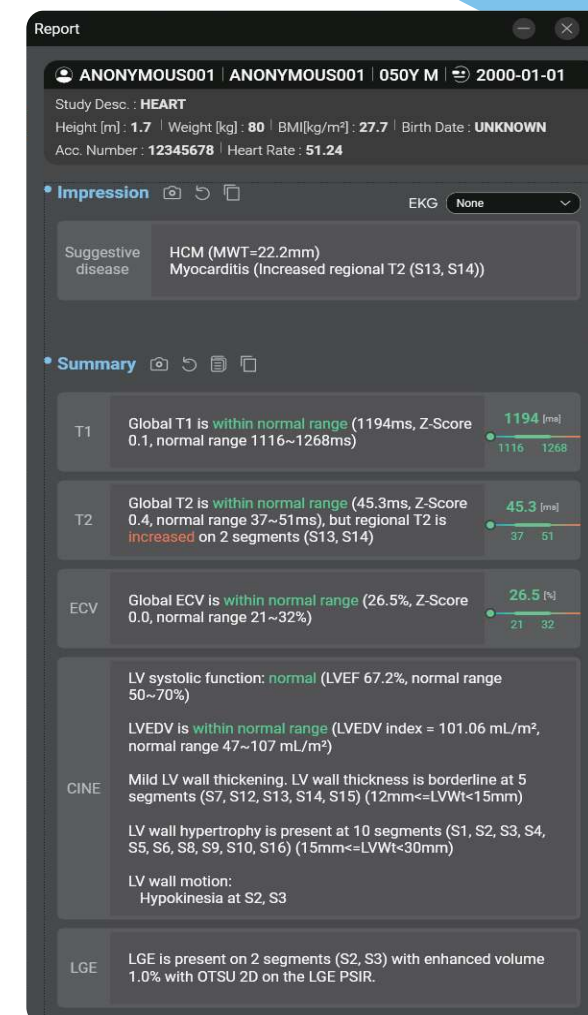
Enables text-based copying and editing for seamless integration into clinical documentation.



Fully compatible with hospital PACS systems for efficient sharing and workflow.

Myomics Report

Creates diagnostic reports
with standardized clinical criteria

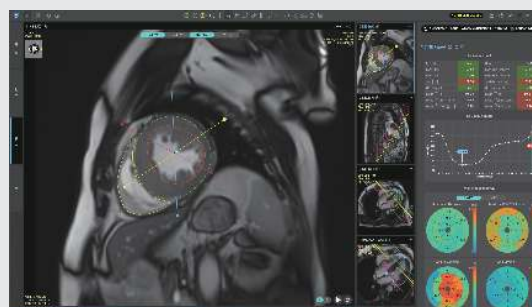


Myomics Functionalities Function

Detect ventricular function, wall motion abnormalities, myocardial strain, and structural changes.

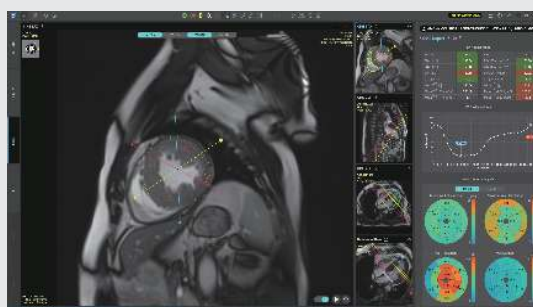
✓ Short Axis

- Automated contour detection for left and right ventricles
- Quantitative assessment for ventricular volumes and masses
- Comprehensive wall analysis



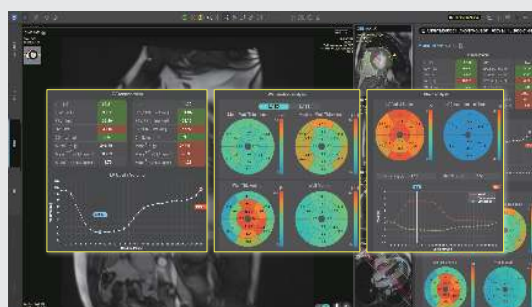
✓ Myocardial Strain

- Global and regional strain analysis (radial, circumferential, longitudinal)
- Comprehensive insights into myocardial performance



✓ Time-Resolved Volume Analysis

- Enhancing accuracy by motion artifacts reduction
- Dynamic tracking of ventricular volume changes throughout the cardiac cycle
- Accurate end-diastolic and end-systolic volume calculations
- Support for precise ejection fraction assessment

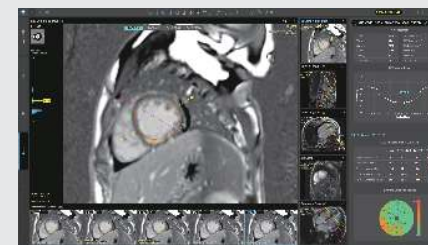


Myomics Functionalities Tissue Characterization

Assessment of myocardial scar, fibrosis, and tissue abnormalities through advanced imaging techniques.

✓ LGE/DE MRI Analysis

- Comprehensive evaluation of late gadolinium enhancement (LGE) and delayed enhancement (DE) MRI.
- Precise detection and quantification of hyper-enhanced myocardial regions.



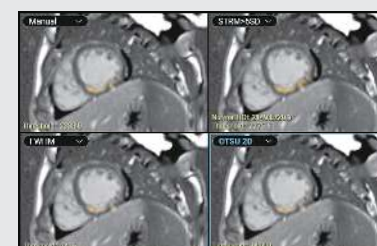
✓ Synthetic LGE

- Alternative to LGE/DE: Synthetic LGE is generated from Post contrast T1 map.
- Less Artifacts: Delivers image quality comparable to Conventional LGE while minimizing artifacts caused by deformation motion or technical limitations.
- Retrospective Adjustment of Inversion Time (TI): Enables flexible adjustment of TI post-acquisition for optimized tissue contrast.



✓ Automatic quantification enhancement

- Automatic detection remote and enhanced region.
- Providing automatic STRM, FWHM, OTSU quantification.

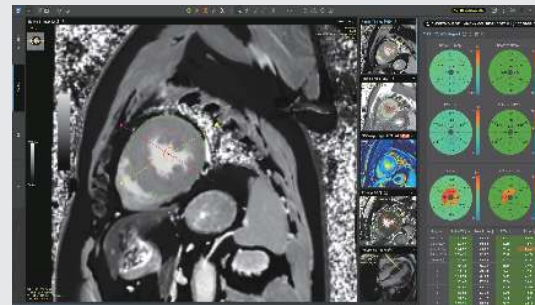


Myomics Functionalities Mapping

Comprehensive evaluation and visualization of myocardial tissue properties through advanced mapping techniques.

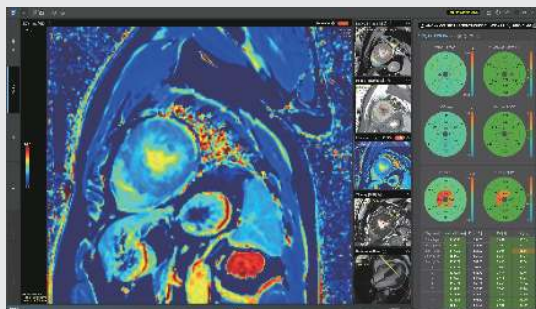
✓ T1 and T2 Mapping

- Accurate analysis of native T1, post-contrast T1, and T2 mapping.
- Supports motion correction for precise mapping results.
- Generates mapping from source image.



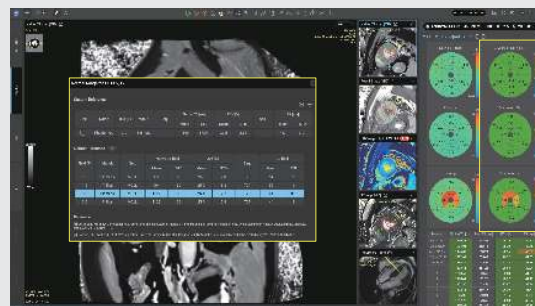
✓ Synthetic ECV Map

- AI-driven estimation of synthetic hematocrit for enhanced diagnostic accuracy.
- Automated creation of extracellular volume (ECV) maps for quantifying myocardial fibrosis.
- Provides consistent and reproducible measurements across diverse patient populations.



✓ Standardized Z-Score Metrics

- Integration of Z-score normalization for consistent interpretation of mapping values.
- Facilitates cross-comparison of data between patients and institutions.

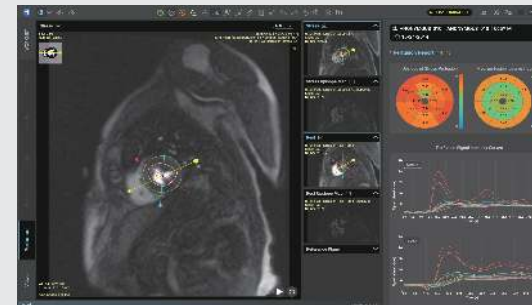


Myomics Functionalities Perfusion

Detect myocardial blood flow abnormalities to assess ischemic heart disease with precision.

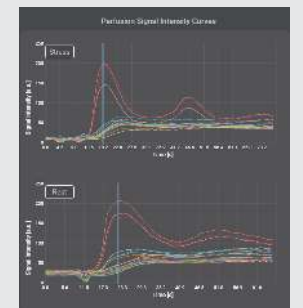
✓ Perfusion Analysis

- Provides a comprehensive evaluation of myocardial perfusion during both rest and stress phases.
- Facilitates visual comparison of ischemic regions to accurately identify perfusion defects.



✓ Rest and Stress Perfusion Curve

- Provides a dynamic assessment of myocardial blood flow under stress and rest conditions.
- Enables early detection of ischemic regions by analyzing perfusion signal intensity variations.



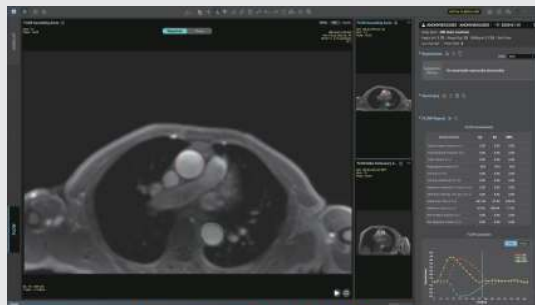
✓ Perfusion Upslope and Reserve Index Map

- Quantifies myocardial perfusion efficiency through upslope and reserve index measurements.
- Supports precise localization of perfusion deficits, aiding in the diagnosis of coronary artery disease.



Myomics Functionalities Flow

Comprehensive blood flow analysis to evaluate cardiovascular function and detect abnormalities.



✓ Auto-Contouring and Vessel Analysis

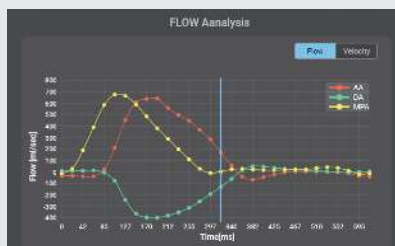
- Automated detection and contouring for key arteries, including ascending aorta, descending aorta, and pulmonary artery.
- Support for arbitrary artery analysis for customized evaluations.

✓ Quantitative Flow Assessment

- Measurement of total forward and backward volume, net positive/negative volume, and regurgitant fraction.
- Visualization of flow dynamics through time-based flow velocity graphs.

• FLOW Report (S)

Measurements	AA	DA	PA
Total Forward Volume (ml)	0.00	0.00	0.00
Total Backward Volume (ml)	0.00	0.00	0.00
Net Volume (ml)	0.00	0.00	0.00
Regurgitant Fraction (%)	N/A	N/A	N/A
Volume (ml)	0.00	0.00	0.00
Volume (Effective) (ml)	0.00	0.00	0.00
Maximum Velocity (m/s)	0.00	0.00	0.00
Minimum Velocity (m/s)	0.00	0.00	0.00
Maximum Flow (ml/s)	641.49	51.54	676.29
Minimum Flow (ml/s)	-57.40	-99.44	-17.56
Net Positive Volume (ml)	0.00	0.00	0.00
Net Negative Volume (ml)	0.00	0.00	0.00



✓ Advanced Flow Insights

- Provides accurate metrics for peak flow velocity and minimum flow values.
- Enables detailed assessment of arterial flow performance and anomalies.

Myomics Functionalities Research

Advancing cardiovascular research with seamless tools for data standardization, advanced analysis, and collaboration.

✓ Standardization Across Scanners

- Ensures consistent imaging quality and results across different scanner models and manufacturers.
- Enables reliable data comparisons in multi-center research studies.

✓ Seamless Data Sharing

- Simplifies sharing of imaging data and results among research teams and institutions.
- Accelerates collaboration and multi-disciplinary innovation with secure, easy-to-access data exchange.

✓ Radiomics Integration

- Extracts advanced imaging biomarkers for deeper analysis of tissue and functional properties.
- Supports detailed quantification of disease characteristics for predictive modeling and personalized medicine.

