Emory Cardiac Toolbox

Advanced software for quantitative cardiac SPECT and PET analysis, featuring AI-powered decision support and automated reporting for nuclear cardiology.

https://example.com/1762583716453

Overview

The Emory Cardiac Toolbox™ (eCTb™), developed by Ernest V. Garcia, PhD, at Emory University and commercialized by Syntermed, is one of the most widely applied cardiac imaging systems in the world. It provides advanced cardiovascular quantification for both SPECT and PET studies, offering 2D/3D image displays and a suite of specialized analysis tools.

Key Capabilities & Features

AI-Powered Clinical Decision Support (Syntermed IDS™): The system is equipped with an image decision support system (IDS) that uses over 230 heuristic rules to perform automatic interpretation of SPECT and PET myocardial perfusion studies. It generates justifications for the diagnosis, which the physician can review and modify.

Automated Natural Language Reporting (SmartReport™): This feature automatically propagates an intelligent, structured report for perfusion, function, and viability, converting quantitative scores into natural language text to expedite the reporting process.

Multi-Modality Analysis: Quantifies and displays myocardial perfusion, function, and LV dyssynchrony studies. It supports SPECT, PET, and CT (for Coronary Artery Calcium Scoring).

SyncTool™ for LV Dyssynchrony: A phase analysis software tool used to evaluate the benefits of Cardiac Resynchronization Therapy (CRT) in heart failure patients, using the same data from perfusion studies.

Specialized Analysis: Includes integrated tools for Amyloidosis Analysis (quantifying myocardial uptake with specific tracers) and FlowTool™ for computing Absolute Blood Flow and Myocardial Flow Reserve (CFR).

Workflow & Integration: Offers improved workflow efficiency, easy, automatic EMR integration, and cloud-based remote reading/reporting via Syntermed Live™.

Target Users and Use Cases

The primary users are Cardiologists and Nuclear Cardiology Technologists in hospitals and imaging centers. The software addresses critical questions like the presence of coronary artery disease, the diagnosis and treatment of heart failure, and the prediction of patient response to specific cardiac therapies.

Key Features

- AI-Powered Clinical Decision Support (Syntermed IDS™)
- Automated Natural Language Reporting (SmartReport™)
- Quantitative SPECT and PET Analysis
- LV Dyssynchrony Analysis (SyncTool™)
- Cardiac Amyloidosis Analysis
- Myocardial Blood Flow and Coronary Artery Calcium Scoring
- Cloud-based Remote Reading (Syntermed Live™)
- EMR Integration

Pricing

Model: enterprise

Pricing is not publicly disclosed and is typically based on an enterprise licensing model, often bundled with OEM imaging systems or a direct license from Syntermed.

Target Company Size: medium, enterprise

Integrations

General Electric (GE), Siemens, Philips, PACS Systems, EMR Systems, ASNC ImageGuide Registry

Compliance & Certifications

FDA 510(k), HIPAA, ISO 13485:2016, CE Mark