

Medis Suite CT

Cardiac diagnostics made simple.

Product Specification Sheet

M-MSP: Medis Suite Platform

- Support for Cardiac CT studies of all major CT vendors
- Access to Cardiac CT studies across the network
- Import of cardiac CT studies from local storage media (hard disk, USB, and CD/DVD)
- DICOM connectivity, receiving cases, query and retrieve, pushing results to PACS
- Centralized database, thick client solution possible with multiple clients
- JPEG2000 support
- Review series side by side, drag 'n drop series into the viewer, cross referencing tools, fast paging through series, simple caliper measurements
- Enhanced workflow, run multiple apps in parallel
- Loading of prior exams in parallel
- Enhanced clinical report, combining all measurements in a single report, snapshots, add comments, save as PDF, view in text format. Clinical XML and JSON output
- User log in
- Role Based Access Control
- DICOM SR output for results of Clinical applications
- User interface and User manual available in multiple language for the Clinical applications

M-MRA: 3D View App

- Viewing 3D MR and CT Angiography series, double oblique viewing, MPR, MIP, slabbed MIP, VR
- CPR (Curved Planar Reformatting)
- Efficient caliper measurements, including double distance measurement
- Sculpting (isolating custom volume of interest)
- Create reformats
- Add temporal resolution

M-CCT: QMass global function module

- Guided workflow
- LV and RV function analysis

- Global function analysis (Simpson's method) on short axis or transversal stack of cines
- Quantification of custom volumes, such as atrial volumes
- Area-length and Bi-plane volumetric analysis methods for long axis cines
- Semi-automatic contour detection for RV and LV
- "LiveContour" algorithm to quickly detect endocardial contours
- "Time-Continuous" contour detection
- Automatic exclusion of images in short axis based on information in long axis
- Auto-detection of papillary muscles and trabeculae with "MassK mode"
- Quantification of EDV, ESV, SV, %EF, CO, CI, indexed values (BSA and height), (time to) peak filling and ejection rate
- Various BSA calculation methods for indexed results
- **NEW: Additional normal ranges papers based on MR studies added**
- **Calculations of z-scores in the report**

M-MRM: QMass regional function module

- Analysis of regional parameters, such as wall motion, wall thickness, wall thickening and wall thickness changes over time
- Regional results are part of the XML and JSON report output

M-SRM: QStrain CT

- **Quantify strain based on feature tracking in SSFP images for LV in either LAX or SAX, RV in 4CH, LA in 2CH or 4Ch and RA in 4CH**
- Quantification of Global strain parameters: GLS, GCS, GRS and Fractional Area change
- Quantification of delta rotation
- Quantification of 16 segment AHA strain parameters: Strain, Strain Rate, velocity
- Quantification of RV segmental (septum and free wall) strain parameters: Strain, Strain Rate, velocity
- Generate results for endo, mid and epicardial wall
- The AHA segment model results are part of the XML and JSON output
- More extensively research report can be exported in XML and MS-Excel

Legal Statements

Medis Suite CT is based on image processing algorithms, developed at the Division of Image Processing, Department of Radiology, Leiden University Medical Center, the Netherlands. Medis is a registered trademark of Medis Associated BV. Medis Suite MRCT has market authorization in the EU, US, UK, Switzerland, Australia, Japan, Korea and Canada.

M-INW: QStrain Inward Displacement add-on

- Quantification of Inward Displacement (InwD) and Inward Displacement Index (InwId) allowing for objective evaluation of regional dysfunction
- Modality independent, works on CT as well as MR series

CTA Analysis for research use only

Workflow

- Fully automatic extraction of the complete coronary tree
- Semi-automatic editing of coronary tree
- Automatic labeling of the segments in the coronary tree with anatomical names
- Analyze multiple vessels at the same time
- A two step contour detection approach per vessel for both lumen and vessel contours.
- Longitudinal detection: provides quick overview of border and allows easy corrections which will propagate to the transversal step.
- Transversal detection: Based on the longitudinal contours and corrections
- Edit contours in longitudinal and transversal images simultaneously
- Flexible lesion detection and definition using synchronized views of the vessel data (stretched MPR, curved MPR, graphs).
- Simple contour editing workflow (2-steps)
- Automatic segment labeling for reporting and statistics

Result

- Lumen and plaque statistics:
 - Degree of stenosis (diameter and area)
 - Lesion length
 - Plaque burden
 - Plaque volume (per lesion and per vessel)
 - Vessel remodeling index
 - Mean plaque and lumen intensities
 - Fixed and adaptive thresholding methods for plaque characterization
 - Plaque characterization components according to Virtual Histology classification: Vessel segment labeling
 - Peri-Vascular Adipose Tissue (PVAT) analysis
- Data export:
 - All analysis results including coronary tree, contours, lesion parameters and vessel labels can be saved and reloaded again for reviewing and/or exporting
 - Easy data export for quantification data (Excel or copy-to-clipboard)

- Batch processing of quantified parameters from multiple-studies into a single spreadsheet
- Segment based
- Lesion based
- Slice based
- Screenshots (jpeg, png, copy to clipboard, DICOM snapshots)
- 3D visualization of plaque in 3D, export of lumen (.stl)

CTA PVAT (add-on)

- Peri-Vascular Adipose Tissue (PVAT) analysis

CTA 3D Workbench (add-on)

- 3D visualization of plaque in 3D, export of lumen (.stl)



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Available packages

Medis Suite CT		Packages			
	Modules	Medis Suite CT Function	Medis Suite CT %EF, 3D View, CT Strain	QAngio CT Research Edition	QAngio CT Research Edition Extended
Clinical	3D Viewer	✓	✓		
	CT Function Global	✓	✓		
	CT Function Regional	✓	✓		
	CT Strain		✓		
	Inward Displacement				
Research	CT Plaque Research			✓	✓
	PVAT Research				✓
	3D workbench Research				✓

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