

# Medis<sup>®</sup> Suite XA

All-in-one solution for anatomical & functional cardiovascular X-ray studies

## FOR QUANTIFIED CLINICAL DECISIONS

- Offers quantified measurements of coronary/ peripheral artery anatomy and heart function

## WORKFLOW EFFICIENCY

- One simple workflow for all applications, easy acquisition and analysis

## ROBUST PLATFORM

- Robust Medis Suite platform, which integrates browsing, analysing and reporting

## WHAT MODULE IN MEDIS SUITE XA?

### • ANATOMY

- 3D QCA Single Vessel
- 3D QCA Bifurcation
- 2D QCA Single Vessel
- 2D QVA Single Vessel

### • HEART FUNCTION

- RV Biplane
- LV Biplane
- LV Monoplane

**AI DEEP LEARNING  
IN MEDIS SUITE XA**



# Product Specification Sheet

## Medis Suite Platform (viewer, connectivity, reporting)

- Improved Image exportation
- User Login & Role-based Access Control
- DICOM SR output for basic calliper measurements.
- Support for coronary and ventricular angiograms of all major X-ray vendors
- Centralized data repository. Thick client solution possible with multiple clients
- Import of angiographic studies from local storage media (hard disk, USB, and CD/DVD)
- DICOM connectivity, receiving cases, query and retrieve, pushing results to PACS.
- Review angiograms side by side, drag 'n drop angiograms into the viewer, fast paging through all angiograms, simple calliper measurements and annotations
- Different angiographic calibration options (isocenter, catheter, sphere/circle, manual)
- Anonymization of studies
- Enhanced workflow, run multiple apps in parallel
- Loading of prior examinations in parallel
- Stored results can be reviewed and/or edited
- Enhanced clinical report, combining all measurements in a single report, snapshots, add comments, save as PDF, view in graphic or text formats. Clinical XML or JSON output.
- Audit trailing

## 3D QCA – Straight Analysis (powered by QAngio XA 3D)

### OPTIMAL CLINICAL WORKFLOW

- Automatic angiographic series loading into the application
- Automatic calibration based on isocenter calibration data in the DICOM files
- Full-screen application during the analysis
- Full analysis workflow is visible during all analysis steps
- Acquisition aid to guide the user in the acquisition of good views for optimal 3D analysis
- Acquisition guide suggesting optimal viewing angle for the second acquisition in online situations
- Efficient pre-selection of angiographic series, showing only series being >25° apart
- ECG display and synchronization with 2D angiographic views
- **NEW:** Automatic ED phase detection based on ECG. When ECG is unavailable, artificial intelligence can detect ED phase for QCA analysis

### QUANTITATIVE ANALYSIS

- Offset correction in case of patient movement in between the acquisitions
- Semi-automated 2D arterial (luminal) contour segmentation based on the proven Medis 2D QCA
- Automated 3D reconstruction of the arterial contours
- Automated 2D and 3D reconstruction of reference contours
- Two reference correction options (normal areas, fixed proximal)
- Automated 3D lesion quantification

### ANALYSIS RESULTS

- Results for multiple lesions and additional user-defined region of interest
- Lumen and plaque statistics:
  - Severity of stenosis (diameter and area)
  - Minimum lumen diameter (MLD)
  - Proximal and distal minimum and maximum diameters (at P- and D-marker positions)
  - Display of 3D reference volume along the entire segment
  - Lesion length
  - Bending angle
- Five optimal views with minimum lesion foreshortening
- Lesion foreshortening calculation for the original 2D projections and the current 3D view

## 3D QCA – Bifurcation Analysis (powered by QAngio XA 3D)

### OPTIMAL CLINICAL WORKFLOW

- Automatic angiographic series loading into the application
- Automatic calibration based on isocenter calibration data in the DICOM files
- Full-screen application during the analysis
- Full analysis workflow is visible during all analysis steps
- Acquisition aid to guide the user in the acquisition of good views for optimal 3D analysis

- Acquisition guide suggesting optimal viewing angle for the second acquisition in online situations
- Efficient pre-selection of angiographic series, showing only series being >25° apart
- ECG display and synchronization with 2D angiographic views
- **NEW:** Automatic ED phase detection based on ECG. When ECG is unavailable, artificial intelligence can detect ED phase for QCA analysis

### QUANTITATIVE ANALYSIS

- Offset correction in case of patient movement in between the acquisitions
- Semi-automated 2D arterial (luminal) bifurcation contour segmentation based on the proven Medis 2D QCA
- Automated 3D reconstruction of the arterial bifurcation
- Automated 2D and 3D reconstruction of reference bifurcation contours
- Manual reference correction option
- Automated 3D lesion quantification

### ANALYSIS RESULTS

- Results for multiple lesions and additional user-defined region of interest, in the proximal or 2 distal branches of the bifurcation.
- Lumen and plaque statistics:
  - Severity of stenosis (diameter and area)
  - Minimum lumen diameter (MLD)
  - Proximal and distal minimum and maximum diameters (at P- and D-marker positions)
  - Display of 3D reference volume along the entire segment
  - Lesion length
  - Bifurcation and bending angle
  - Bifurcation core volume
- Five optimal views with minimum lesion foreshortening
- Optimal view for bifurcation
- HK / Murray / Finet ratios.

## 2D QCA & QVA (powered by QAngio XA)

### OPTIMAL WORKFLOW

- Automatic angiographic series loading into the application
- Automatic calibration based on isocenter calibration data in the DICOM files
- Other calibration options (catheter, sphere, manual and line calibration) available in the Medis Suite Viewer
- Full screen application during the analysis
- Full analysis workflow is visible during all analysis steps
- ECG display and synchronization with the angiogram
- **NEW:** Automatic ED phase detection based on ECG. When ECG is unavailable, artificial intelligence can detect ED phase for QCA analysis
- Image subtraction

### QUANTITATIVE ANALYSIS

- Automated 2D arterial (luminal) contour segmentation
- Improved Reference Contours, especially on low dose images
- Two reference correction options (normal areas, fixed proximal)
- Optional Stent analysis including stent edges

### ANALYSIS RESULTS

- Results for multiple lesions and additional user-defined region of interest
- Lumen and plaque statistics:
  - Severity of stenosis (diameter and area)
  - Minimum lumen diameter (MLD)
  - Proximal and distal diameters (at P- and D-marker positions)
  - Lesion length
- Stent related statistics
  - Length of stent and stent edges
  - MLD and its position
  - In-stent Mean diameter

## Monoplane Left Ventricular Analysis

- Semi-automated ED- and ES-contour detection or manual contour drawing
- Volumes corrected for papillary muscles
- Volume regression method according to Kennedy
- Centerline regional wall motion model including normal value band
- Indexed values (using patient height, patient weight, and heart rate)

## Biplane Left and Right Ventricular Analysis

- Enhanced GUI & workflow
- Manual contour drawing
- Volume corrected for papillary muscles
- Regression methods for adult and pediatric patients
- Indexed values (using patient height, patient weight, and heart rate)





#### Legal Statements

Medis Suite and QAngio XA have market clearance for USA, Canada, EU, Australia, Japan and South Korea.

QAngio XA 3D (incl. QFR) has market clearance for the USA, Canada, EU, Australia, Brazil, Malaysia, Singapore, Indonesia and South Korea. Market clearance in Japan is pending.

In China QFR is distributed by Pulse Medical Imaging Technology (Shanghai) Co., Ltd. as part of their AngioPlus system.

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