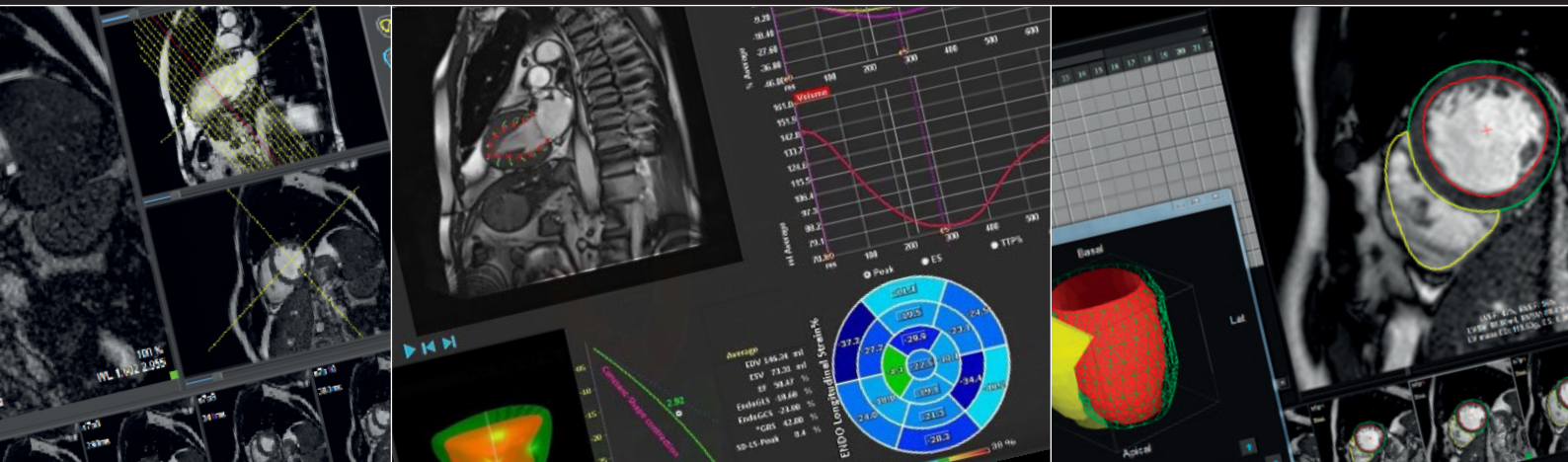




OLEA SPHERE

# CARDIO PACKAGE



Our Cardio package is the complete solution for CMR cases. It includes a practical CMR viewer, advanced clinical applications and convenient reporting all in one.

# INCLUDED CONTENT

## **3D View: visualization of MR angiography images. 2D / 3D visualization and measurements**

Viewing 3D MR and CT Angiography series | double oblique viewing | MPR | MIP | slabbed MIP | VR  
Efficient caliper measurements  
Sculpting (isolating custom volume of interest)  
Create reformats

## **QMass: quantitative analysis of cardiac MR studies. Ventricular function analysis**

**Analysis:** LV and RV function | global function | atrial volumes | area-length and Bi-plane volumetric methods | wall motion | wall thickness | wall thickening | wall thickness changes over time | T2-weighted | combined DSI-T2-weighted | T2-ratio  
**Automation:** LV endo and epi, RV endo automatic contour detection | short axis images exclusion based on long axis information | papillary muscles and trabeculae detection | scar tissue quantification | infarct detection  
**Customization:** semi-automatic contour editing | various BSA calculation methods for indexed results | various normal ranges possible | z-scores calculation | various automated threshold calculation methods | threshold per slice or per phases  
**Quantification:** EDV, ESV, SV, %EF, CO, CI, indexed values (BSA and height) | peak filling and ejection rate | infarct size (% and mass) | infarct transmuralty | regions of hyper-, intermediate and hypo-intense signal intensities

## **QFlow: quantitative analysis of velocity-encoded MR studies. Quantify arterial and transvalvular blood flow**

**Analysis:** reporting | background subtraction to correct for flow-induced artefacts | color-coding to visualize velocities | phase unwrap to correct for aliasing  
**Automation:** automatic calculation of flow volumes, velocities and regurgitant fraction | automatic contour detection and easy-to-use functionality for editing contours | three-click flow and velocity analysis of any type of vessel  
**Quantification:** flow analyses of vessels, valves and CSF | measurement of slow flow volumes and velocities | calculation of maximum pressure and mean systolic pressure gradient | velocities per pixel | velocities peak

## **QMap: stress and relaxometry images quantification**

**Analysis:** parametric maps for: ECV, T1, T1\*, T2 | offset, scaling, fit residual error | display of relaxation graphs | comprehensive results for myocardial segments and up to 4 ROI's  
**Customization:** flexible manual motion correction | flexible co-registration of T1 native (pre-contrast) and T1 post-contrast maps  
**Communication:** save maps as DICOM | save results to MS-Excel

## **QStrain: quantification of myocardial deformation in MR cardiac studies**

**Analysis:** quantify strain in LV long and short axis orientations based on feature tracking in SSFP images | generate results for endo, mid and epicardial wall  
**Automation:** ability to re-use contours from QMass for strain quantification  
**Quantification:** quantification of Global strain parameters: GLS, GCS and GRS | quantification of delta rotation | quantification of 16 segment AHA strain parameters: Strain, Strain rate, velocity  
**Communication:** generate detailed results and export to MS-Excel

# CLINICAL SPECIALTIES COVERED

Cardiac

## OTHER AVAILABLE SOLUTIONS

**Body package:** complete solution to manage oncology, MSK and metabolic disorders imaging

## REQUIREMENTS

Platform		Stand-alone	Client	Server
<b>Operating systems</b>	<i>minimum</i>	Windows® 7, 8.1, 10 x32	Windows® 7, 8.1, 10 x32	Windows® 7, 8.1, 10 Windows® 2008 (R2),
	<i>recommended</i>	Windows® 7, 8.1, 10 x64	Windows® 7, 8.1, 10 x64	Windows® 2012 (R2), Windows® 2016
<b>System RAM</b>	<i>minimum</i>	4 GB	4 GB	4 GB
	<i>recommended</i>	12 GB+	12 GB+	12 GB+
<b>Hard Drive</b>	<i>minimum</i>	250 GB	250 GB	250 GB
	<i>recommended</i>	1 TB (SSD recommended)	250 GB (SSD recommended)	250 GB (SSD recommended)
<b>GPU</b>		Dedicated Open GL compatible 512 MB PCIe x16	Dedicated Open GL compatible 512 MB PCIe x16	Dedicated Open GL compatible 512 MB PCIe x16 <sup>1</sup>
<b>Processor</b>		Quad Core	Quad Core	Quad Core
<b>Screen</b>		22 " 1920 x 1080	22 " 1920 x 1080	-
<b>Network</b>	<i>minimum</i>	-	>= 100Mbit/s and latency <= 1 msec	
	<i>recommended</i>	-	>= 1000Mbit/s and latency <= 1 msec	

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Olea Sphere® v3.0, medical imaging post-processing software, is a medical device manufactured and marketed by Olea Medical®. This medical device is reserved for health professionals. This software program has been designed and manufactured according to the EN ISO 13485 Quality management system. Read the instructions in the notice carefully before any use. Instructions for Use are available on <http://www.olea-medical.com/en/>

Manufacturer: Olea Medical® S.A.S. (France). Medical devices Class IIa / Notified body: CE 0459 GMED.  
3D View, QMass, QFlow, QMap, QStrain: Manufacturer: Medis medical imaging systems by Distributor: Olea Medical®

QMap and QStrain are for research use only

**IMPROVED  
DIAGNOSIS  
FOR LIFE**