### **PHILIPS**

Magnetic Resonance

Cardiovascular

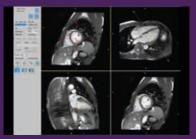
# Extending the power of MR

Clinical applications portfolio

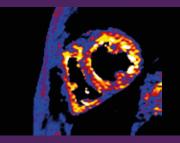
# Our **Cardiovascular** applications

Cardiac imaging is a dynamic, fast-moving field. Philips provides solutions to help you keep pace with trends, including support for image analysis and direct quantification. Our clinical applications support fast, robust cardiac imaging and visualization, helping you make an informed diagnosis. This advanced toolset lets you make MR personalized and definitive through quantitative results.

Philips MR clinical applications for vascular exams deliver robust and fast insights into intricate vascular structures. High spatial and temporal resolution helps you clearly visualize the exact information you need to make diagnostic and treatment decisions.



**Real Time Cardiac** Benefit from intuitive planning for cardiac studies

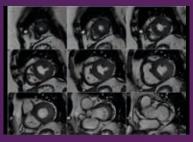


StarQuantPage 6Non-invasive T2\* and T2 assessmentof myocardial tissue



mDIXON XD MultiStation Page 10 Non-subtraction peripheral MR Angiography

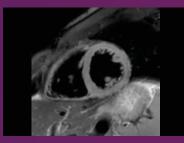
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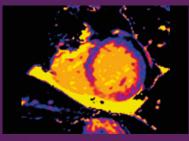
**k-t BLAST** Speed up your dynamic cardiac examinations



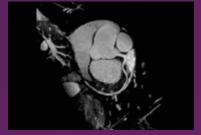
Cardiac Expert Page 4 Expand your cardiac MR functionality



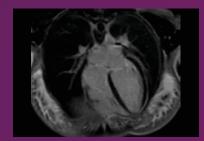
Cardiac MS/QF Page 5 Elevate your cardiac imaging to clinical routine level



CardiacQuant Page 7 Non-invasive T2\*, T2 and T1 assessment of mvocardial tissue



Coronary Acquisition Page 8 Perform non-invasive imaging of coronary arteries



mDIXON XD FFE Page 9 Fat-free cardiac imaging



4D-TRAK XD Page 11 Flexibility in your MR Angiography studies

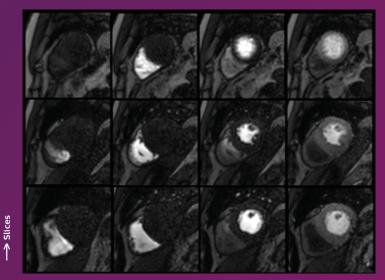


### **Cardiac Expert**

# Expand your cardiac MR functionality

Cardiac Expert supports the acquisition of multi-slice, dynamic tissue studies with T1 weighting and uniform tissue suppression<sup>1</sup> by including Look Locker methods for determining an optimal inversion delay time. Cardiac Expert also provides myocardial tagging<sup>2</sup> to allow assessment of regional wall motion and allows for real-time interactive planning of challenging cardiac views.



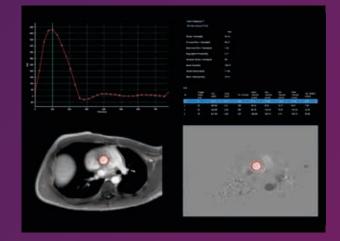


→ Dynamics

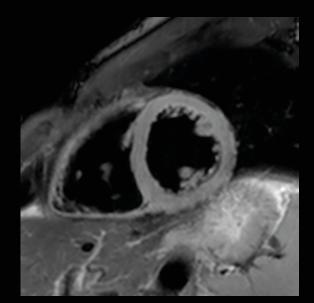
### Cardiac MS/QF

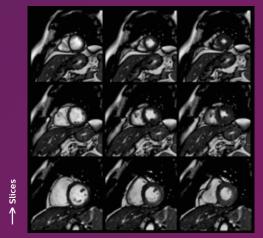
## Elevate your cardiac imaging to clinical routine level

Cardiac MS/QF adds multi-slice capability to your multi-phase cine acquisitions, and supports myocardial tissue characterization by allowing for black blood imaging. Cardiac MS/QF also allows for non-invasive measurements of blood flow by including display of color-encoded flow maps.



Non-invasive measurements of blood flow



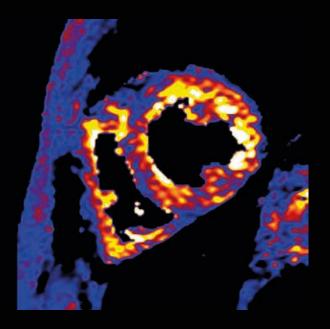


-> Phases

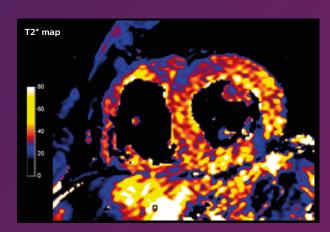


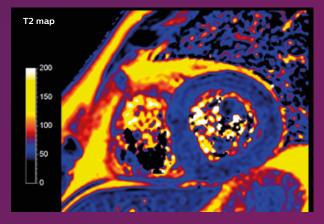
### StarQuant

## Non-invasive T2\* and T2 assessment of myocardial tissue



With StarQuant you get access to exciting new applications for cardiology, which can help in the non-invasive assessment of myocardial tissue characteristics by providing you with comprehensive graphs and pixel-based, quantitative T2/R2 and T2\*/R2\* maps in a single breathhold scan helping you to make early decisions for therapy.

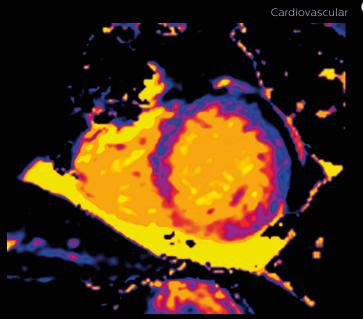




Quantitative T2\* and T2 maps in a single breathhold scan

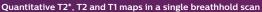
### CardiacQuant

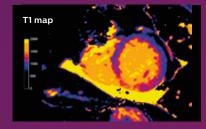
# Non-invasive T2\*, T2 and T1 assessment of myocardial tissue



With CardiacQuant you get access to exciting new applications for cardiology, which can help in the non-invasive assessment of myocardial tissue characteristics by providing you with comprehensive graphs and pixel-based, guantitative information in different regions of the myocardium helping you to make early decisions for therapy.





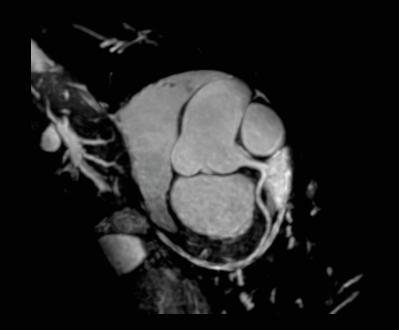




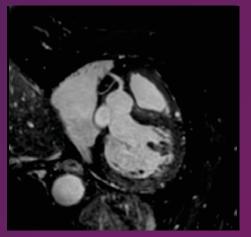


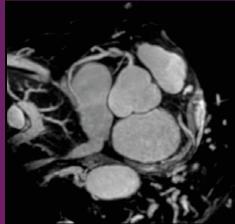
### **Coronary Acquisition**

### Perform non-invasive imaging of coronary arteries



Coronary Acquisition allows for non-invasive imaging of coronary arteries by displaying good contrast between myocardium and vessels by deploying 3D sequences combined with MotionTrak respiratory navigators for real-time motion correction and T2-preparation.





Non-invasive imaging of coronary arteries

### **mDIXON XD FFE**

# Fat-free cardiac imaging

mDIXON XD FFE improves your fat-free imaging for high resolution scans and provides more efficient dynamic scans. With up to four image types in one single scan, including with or without fat suppression contrasts, mDIXON XD FFE will enable you to enhance your imaging strategies by simplifying your cardiac dynamic FFE procedures.





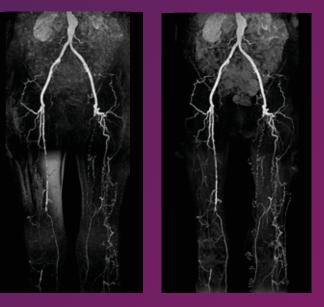
Acquire up to four image types in one single scan



### mDIXON XD MultiStation

## Non-subtraction peripheral MR Angiography

mDIXON XD MultiStation allows you to perform peripheral MR Angiography with improved vesselto-background contrast in only one single pass1. You will be able to perform your peripheral MR Angiography acquisitions without the use of a subtraction mask, eliminating artifacts that could arise from misalignment, due to patient motion, between the pre and post contrast scan. Enjoy fast, robust peripheral MR Angiography.



MR Angiography with subtraction (left) and in one single pass (right) with improved vessel-to-background contrast



#### Additional information:

- Subtraction-less peripheral MR Angiography
- Improved vessel-tobackground contrast by 30-36%<sup>1</sup>

#### **4D-TRAK XD**

### Flexibility in your MR Angiography studies

4D-TRAK XD provides a fast, dynamic contrastenhanced MR Angiography method with flexible sampling of both the arterial- and venous phase, by applying view sharing technique, enabling high spatial and temporal resolution simultaneously.





Fast, dynamic contrast-enhanced MR Angiography





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