cvi42® | Strain

Quantify myocardial deformation without additional time in the scanner. Increase sensitivity for detection of mild functional abnormalities in contrast to EF alone.

For more information, contact us at **sales@circlecvi.com** or scan the QR code.

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At the **Heart** of
IMAGING

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CARDIOVASCULAR
IMAGING

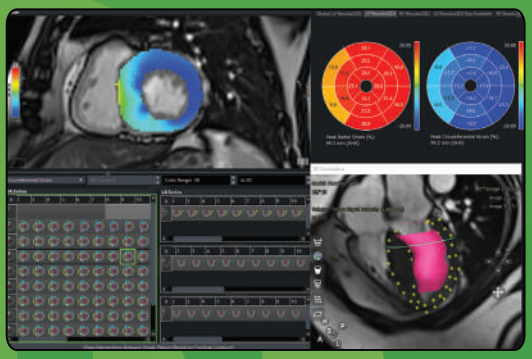
MR Magnetic Resonance

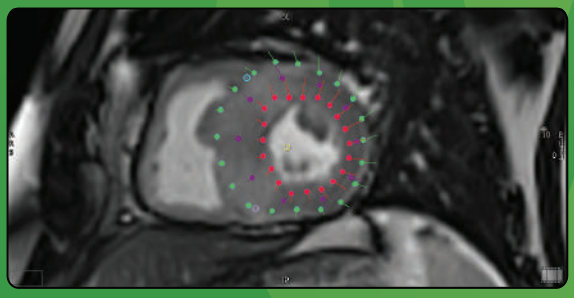
cvi42®

Evaluate qualitative and quantitative myocardial deformation using only SAX and LAX cine series without requiring additional scanner time. Enhance sensitivity for detecting mild functional abnormalities compared to ejection fraction (EF) alone.

MYOCARDIAL MR STRAIN

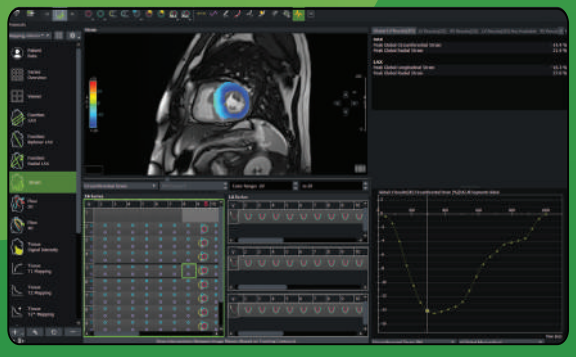
- Automated AI-based ventricular contour detection on SAX, 2CV, 3CV and 4CV LAX series
- Global and regional LV and RV strain assessment in 2D
- Global and regional LV and RV strain assessment in 3D*
- Calculation of radial, circumferential and longitudinal peak strain, strain rate, displacement, velocity, torsion and torsion rate
- Display strain results by curve and map overlays for left and right ventricle





Myocardial strain using CMR-FT provides independent and incremental prognostic benefit over clinical features and traditional CMR markers such as LVEF and LGE in patients with suspected myocarditis.**

Assessment of both LV and RV myocardial strain has shown to be a useful tool to predict major adverse cardiovascular events (MACE); in a FT study on more than 300 patients, adding biventricular strain analysis to conventional ejection fraction assessment increased the detection of patients experiencing adverse outcome: LV global transverse strain and RV global radial strain proved to be the strongest predictors of MACE***.



*Research use only in USA.

**Dreisbach, J.G., Mathur, S., Houbois, C.P. et al. Cardiovascular magnetic resonance based diagnosis of left ventricular non-compaction cardiomyopathy: impact of cine bSSFP strain analysis. J Cardiovasc Magn Reson 22, 9 (2020). https://doi.org/10.1186/s12968-020-0599-3

***Yang LT, Yamashita E, Nagata Y et al (2016) Prognostic value of biventricular mechanical parameters assessed using cardiac magnetic resonance feature-tracking analysis to predict future cardiac events. J Magn Reson Imaging. doi:10.1002/jmri.25433

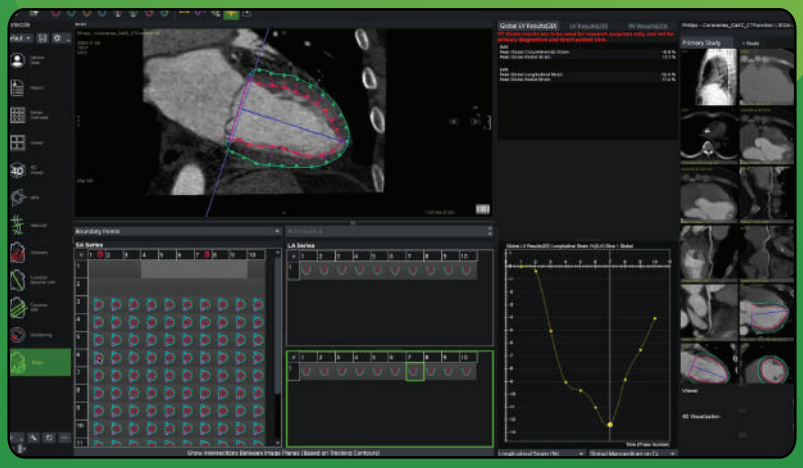
CT Computed Tomography

cvi42

cvi**42** | CT Strain enables a comprehensive view of myocardial tissue deformation, regional dysfunction and the heart's mechanical properties, all without additional scans. By pre-processing multi-phase volumetric CT studies and leveraging data-driven analyses, cvi**42** now allows you to compare subtle changes over time and detect early signs of dysfunction.

MYOCARDIAL CT STRAIN [†,††]

- AI–based re-slicing of multi-phase volumetric CT studies to create short-axis and long-axis series for strain assessment.
- AI-based contouring of reformatted series.
- Automated calculation of radial, circumferential and longitudinal peak strain, strain rate, displacement, velocity, torsion and torsion rate.
- Easy to deploy and integrate smoothly into your existing clinical environment.



[†] New license required.
[††] Not for clinical use.

Brief Summary: Indications, contraindications warnings and precautions can be found in the product labelling.

Disclaimer: Not all modules or features are available in every region. Contact your local Circle representative for all regional availability.

CAUTION: Federal law (USA) restricts these devices for sale by, or on the order of a physician. The system is intended for use only by trained Healthcare Professionals.