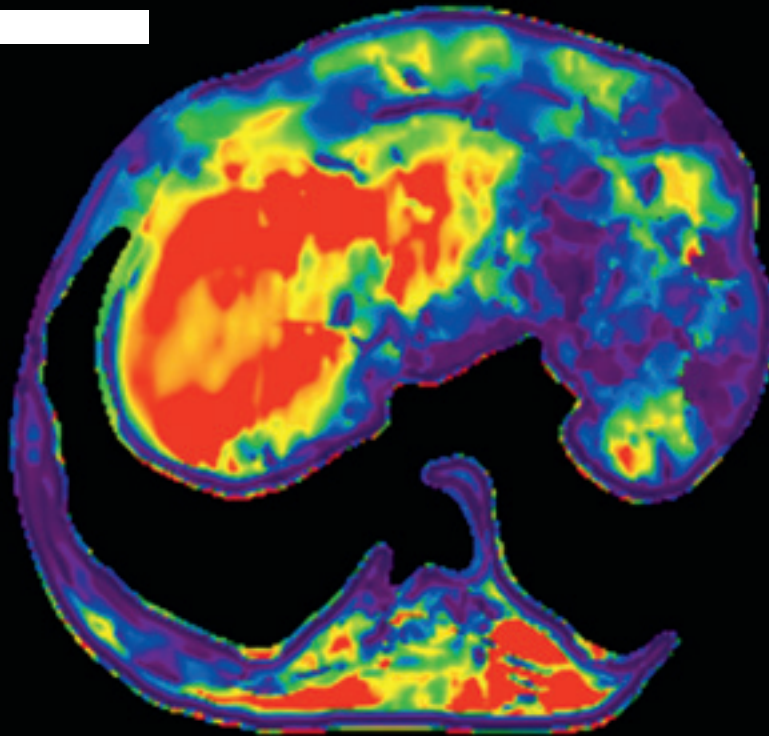


SIEMENS



www.siemens.com/mr

MR Elastography

Non-invasive assessment of variations in tissue stiffness

Answers for life.

MR Elastography

Liver fibrosis is an excessive accumulation of extracellular matrix proteins including collagen that occurs in most types of chronic liver diseases. Advanced liver fibrosis results in cirrhosis, liver failure, and portal hypertension, where liver transplantation may be the only treatment option. Diagnosis traditionally requires liver biopsy and there is an acknowledged need for accurate less invasive methods to detect and follow chronic liver disease. These challenges have led to increasing interest in MR Elastography as a clinical and research tool.

The principle

By applying mechanical waves, MRI can now be used to non-invasively assess variations in tissue stiffness.

In collaboration with Mayo Clinic

MR Elastography is now available from Siemens for *syngo MR D11D**. The Elastography package includes hardware, pulse sequence, and processing software.



The MR Elastography package

Hardware and software**

- Resoundant® active and passive drivers
- Sequence and protocols with 2D gradient-echo sequences with cyclic motion-encoding gradients (MEG)

Advanced Siemens implementation

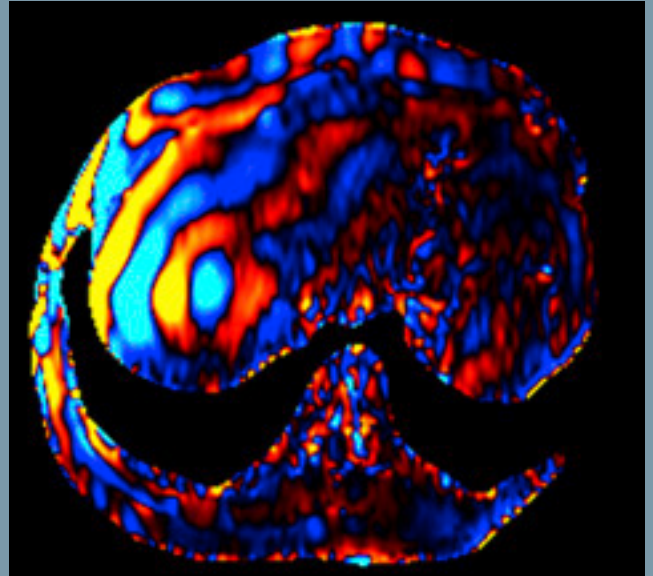
- iPAT enables shortened breath-hold time
- Fully integrated processing of the elastogram at the scanner
- Completely automated calculation of wave images and corresponding elastograms
- Statistical confidence map for reliability

Benefits

- A new MRI-based biomarker for characterizing tissue non-invasively
- A new approach for improved treatment decisions, especially in liver fibrosis

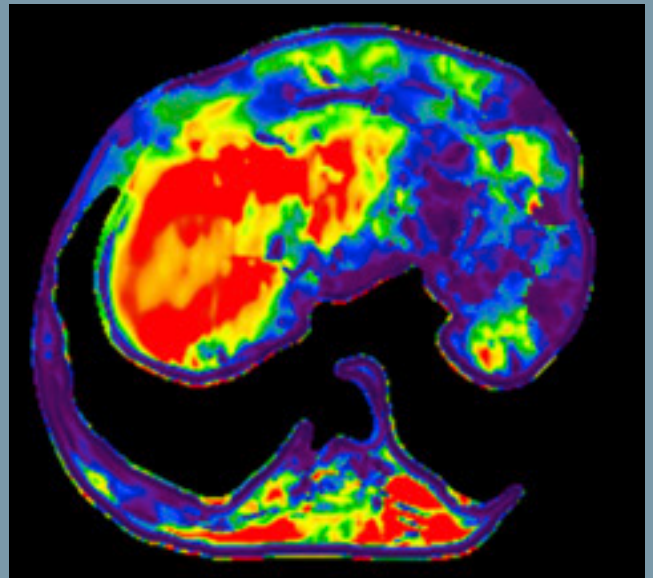
* This information about this product is preliminary. The product is under development and not commercially available in the U.S., and its future availability cannot be ensured.

** The MR Elastography hardware is a product of Resoundant Inc.



Wave image

- obtained by the application of mechanical waves
- while measuring with a motion-sensitive MR sequence



Elastogram

- calculated from the wave image
- providing reliable data about tissue stiffness

The products/features (here mentioned) are not commercially available in all countries. Due to regulatory reasons their future availability cannot be guaranteed. Please contact your local Siemens organization for further details.

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