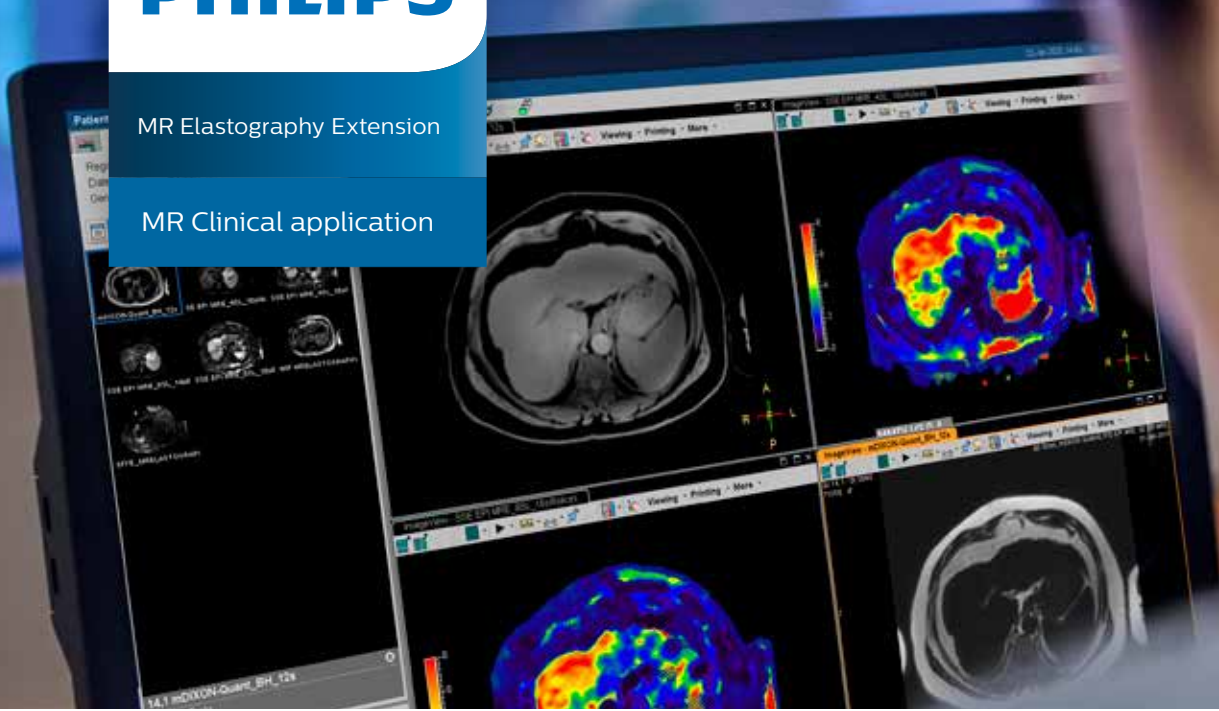


PHILIPS

MR Elastography Extension

MR Clinical application



Boost diagnostic confidence with more robust liver tissue stiffness maps

The MR Elastography Extension has been developed to enhance diagnostic confidence by delivering faster, more robust stiffness maps across larger regions in the liver. With this new extension, MRE (SE-EPI) can be performed up to 8 times faster and in a single breathhold¹ compared to FFE MRE (gradient echo), while delivering equal or better image confidence. FFE MRE requires one breathhold per slice. The MR Elastography Extension supports you in getting consistent results for diverse patients. At high field strength the MR Elastography Extension provides more robust stiffness maps², since the technique is more resistant to low T2* signal fall out compared to FFE.

MR Elastography allows for a non-invasive assessment of tissue stiffness of the liver in a single breathhold scan³. Image processing is fully integrated at the scanner with automated calculation of elastograms, providing trained physicians with additional input to help make informed decisions about treatment.

¹ Compared to Philips MR Elastography (gradient echo), at 3.0T.

² Compared to Philips MR Elastography, based on MRE confidence map.

³ Compared to Philips MR Elastography (1 breathhold/ slice), for clinically used slice coverage of 4-5 slices.

MR Elastography Extension

Field strength	Digital 1.5T and 3.0T systems, excluding Ingenia Prodiva and Multiva ⁴
Prerequisite	MR Elastography SW option
Main applications	Liver
Sequence	SE-EPI MRE, synchronized with an external source of mechanical vibration (Resoundant®).
Image types	Automated calculation of Elastograms, reflecting tissue stiffness in kPa. Statistical confidence map provided for reliability assessment.
Speed	Acquisition within a single breathhold enabled by SE-EPI. Leverages the efficient dS SENSE parallel imaging technology.
Image quality	Provides robust stiffness map since the technique is more resistant to low T2* signal fall out compared to FFE. Optimal signal-to-noise due to dStream's digitization at the patient.

⁴ Ingenia Prodiva 1.5T and Multiva 1.5T are not for sale in the USA.

MR Elastography
2D FFE phasecontrast
Stiffnes map (in kPa)
16s breathhold per slice
1.5 x 4.7 x 10.0 mm, 1:11 min
Ingenia Elition 3.0T

MR Elastography Extension
2D SE-EPI
Stiffnes map (in kPa)
16s breathhold per 4 slices
5.3 x 5.1 x 10.0 mm, 0:13 min
Ingenia Elition 3.0T

MR Elastography Extension
2D SE-EPI
Stiffnes map (in kPa)
16s breathhold per 8 slices
5.3 x 5.1 x 10.0, 0:14 min
Ingenia Elition 3.0T

	Roi A
Average stiffness (in kPa):	8.55
Median of stiffness (in kPa):	8.28
Minimum stiffness (in kPa):	7.06
Maximum stiffness (in kPa):	11.55
Standard deviation (in kPa):	1.08
Total numbers of pixels:	369.00
Number of excluded pixels:	0.00

