

SR Pulse 710™



1.5T wide-bore
has never been this affordable

Swissray 

SR Pulse 710™

Every facility wants *a wide-bore MRI*

But not everyone can afford a new one. Until now.
Discover the SR Pulse 710™ MRI from Swissray. The SR Pulse 710™
was designed and built specifically for facilities that need a reliable,
high throughput, workhorse MRI system.

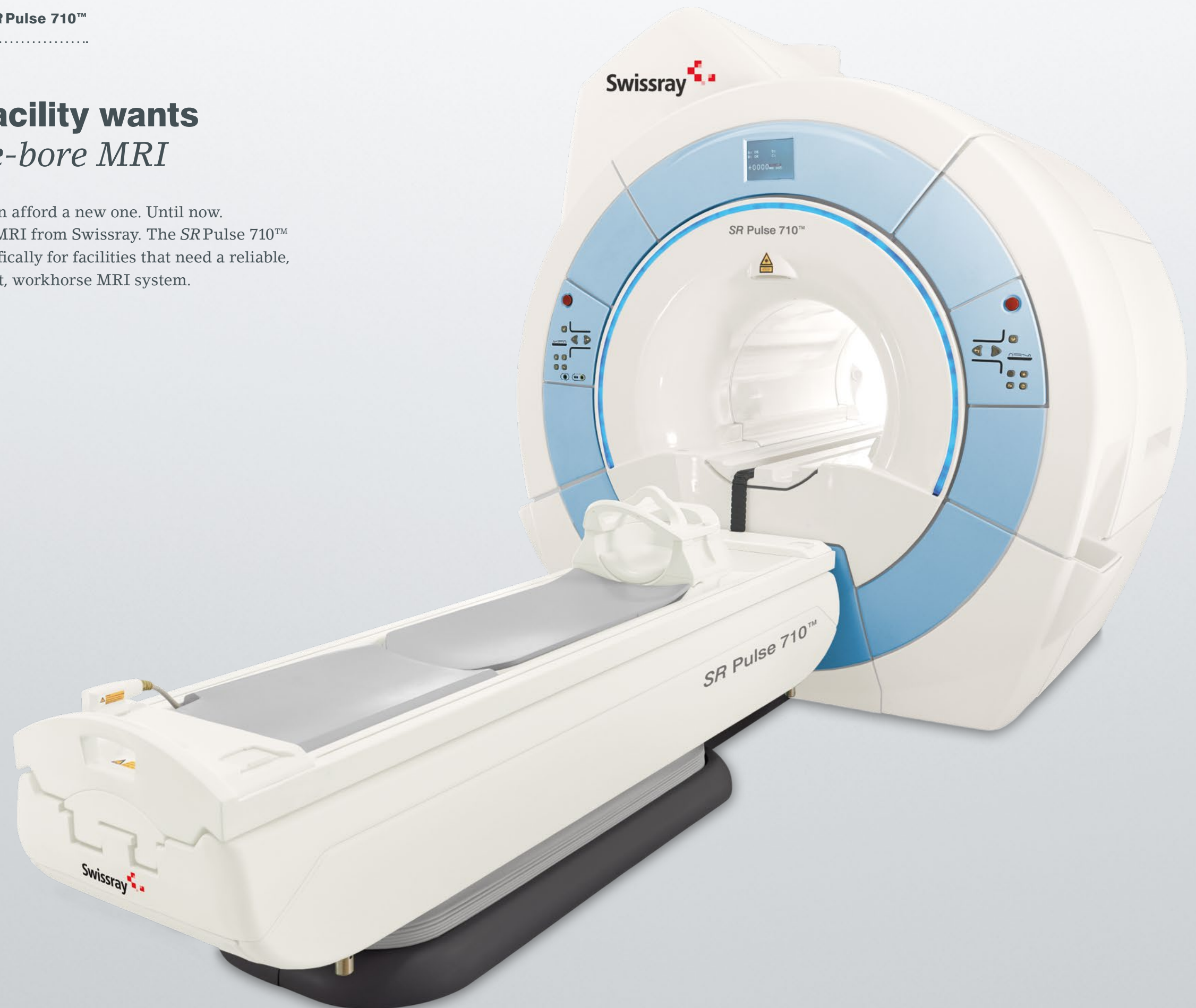
The SR Pulse 710™ has every-
thing you need in a new system

A 71 cm wide-open bore

High-resolution, exceptional image quality

Lowest total cost of ownership

Fastest break-even for new wide-bore



Don't scare patients away *with fears about a narrow-bore MRI experience*

Make sure every patient who walks through your door stays... to be scanned. The SR Pulse 710™ MRI system offers a 71 cm wide-bore that can accommodate patients of all sizes.

71 cm wide-bore and 550 lb table weight

With obesity on the rise, a 60 cm bore is a no-go for many patients – and that's a problem for your staff and your bottom line. The SR Pulse 710™ features a 71 cm wide-bore and a wide couch that comfortably supports patient weights up to 550 lbs (250 kg), which means a better experience for everyone.



A better *patient experience*

With automated protocols you'll increase efficiency and reduce the time the patient will spend on the table. With the SR Pulse 710™, your technologists control the patient environment. Variable lighting and airflow ensure optimal comfort for patients of all shapes and sizes. We also provide a built-in audio system option. A comfortable environment benefits all patients, while helping your staff optimize throughput.



The SR Pulse 710™'s 50 cm field of view allows more comfortable off-axis imaging, while still providing homogeneous fat suppression for clinical accuracy.



Quality images *drive clinical precision*

SR Pulse 710™ components are designed and developed by a USA engineering team members, of which have been awarded 87 MR imaging patents.



Images that meet your clinicians' most rigorous demands

High-homogeneity magnet

The SR Pulse 710™ magnet provides a 50 × 50 × 50 cm usable field of view.

Better gradient performance

33 mT/m gradients drive to peak power in 0.25 milliseconds.

New multi-element coil arrays

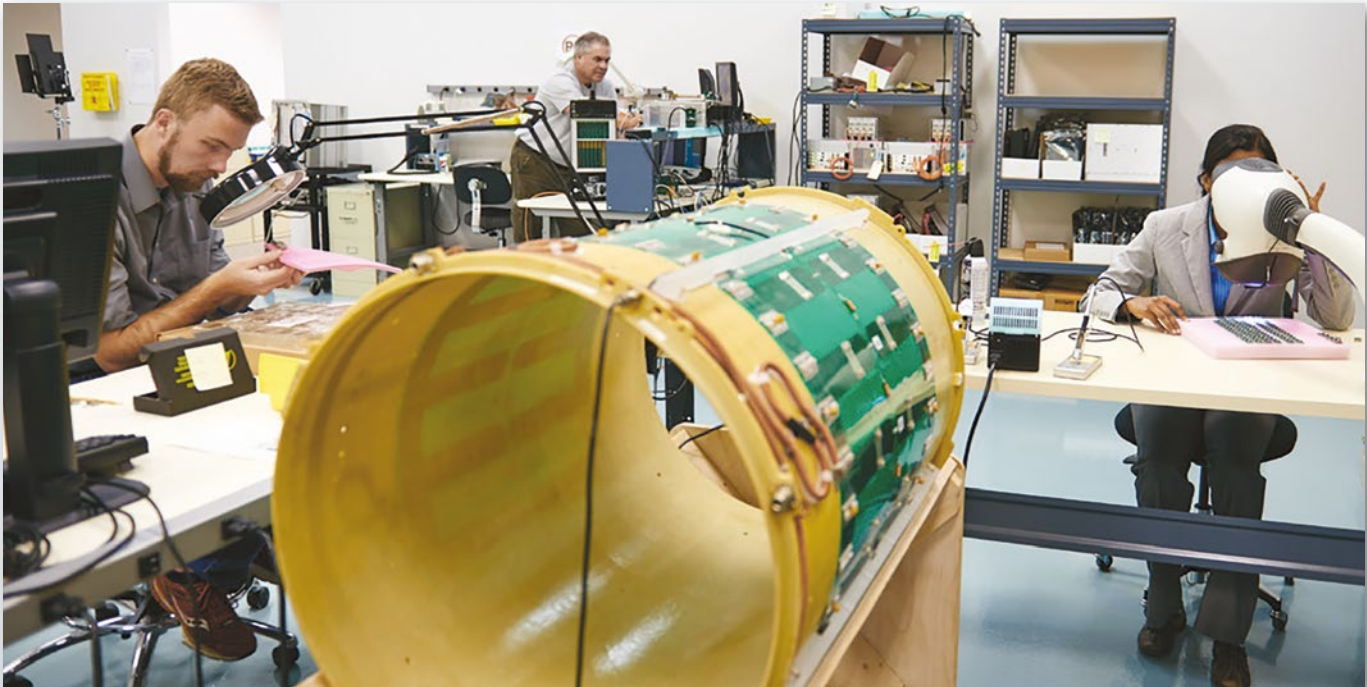
The SR Pulse 710™'s coil arrays, built into the tabletop and selected through programmed protocols, reduce the need for time-consuming repositioning.

Comprehensive software capabilities

The SR Pulse 710™'s user-friendly protocols optimize efficiency and support high-throughput scanning.

MRI engineering expertise

We assist healthcare providers in reducing diagnostic imaging costs while delivering additional patient benefits and, in doing so, make a significant impact on the global healthcare industry.



Swissray focuses on imaging and MRI system performance and service

Our leadership: Recognized expertise in medical imaging and engineering

Our team: Industry experts in the design, manufacture and service of advanced imaging systems

A better imaging value

SRPulse 710™ is the high-value choice for facilities seeking to replace aging MRI systems with an industry-standard wide-bore MRI. SRPulse 710™ meets patient demand for a wide-bore MRI system while providing the images and advanced capabilities your clinicians demand.

The SR Pulse 710™

Provides the highest value 1.5T wide-bore solution for your facility.

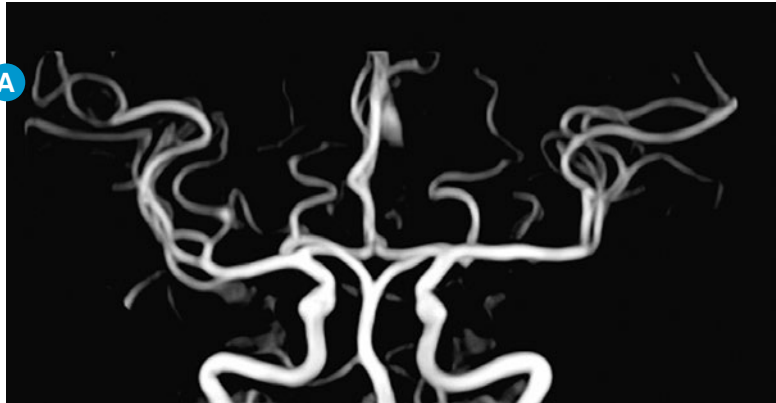
Hardware and software components are designed and built through the collaboration of a U.S. R&D team.

The system is assembled and fully tested in an FDA-approved manufacturing facility in Northeast Ohio. It's how we deliver your wide-bore MRI at a surprisingly affordable cost of ownership.

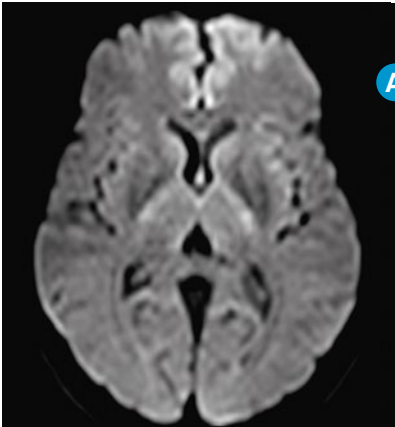
- Reduced service costs**
With a ZBO (zero boil-off) magnet, the SRPulse 710™ eliminates expensive cryogen replacement.
- High throughput – low break even**
The SRPulse 710™’s intelligent, automated protocols offer high throughput. Combined with an attractive purchase price and low operational costs. The SRPulse 710™ requires very low procedure numbers to break even.
- Reliable components**
From the superconducting magnets to the RF coils, SRPulse 710™’s components are designed for reliability.



SR Pulse 710™ images



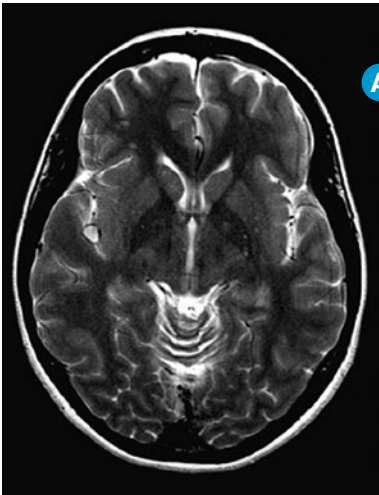
Circle of Willis time of flight angiography



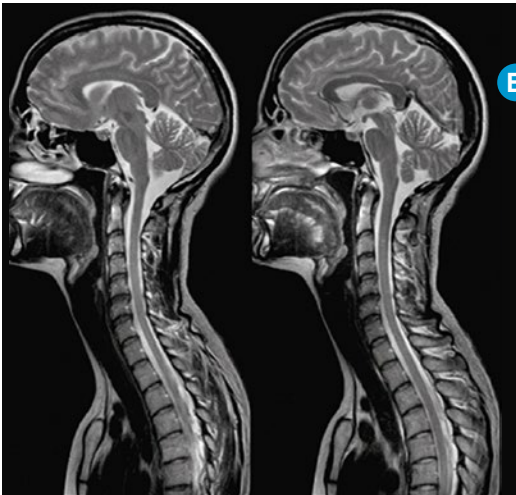
Diffusion weighted imaging



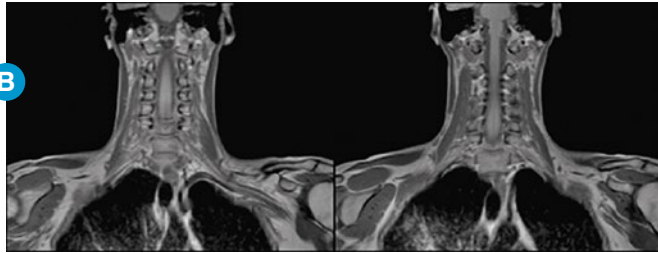
T1 Axial brain



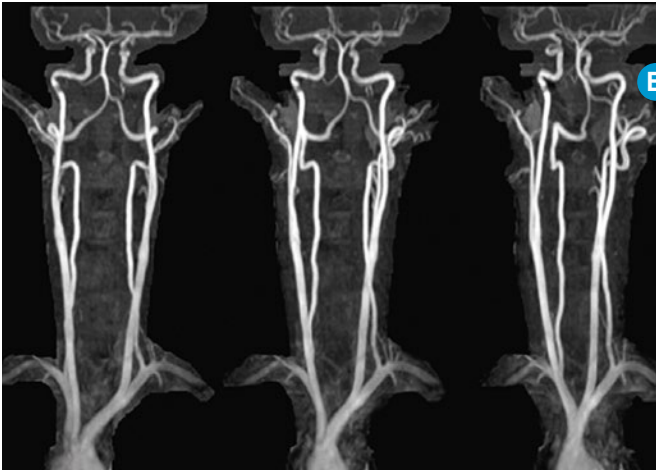
T2 Axial brain



T2 Fast spin echo full coverage – HNV array

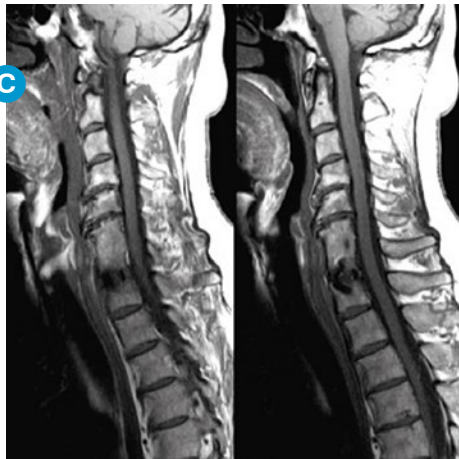


T1 Fast spin echo brachial plexus

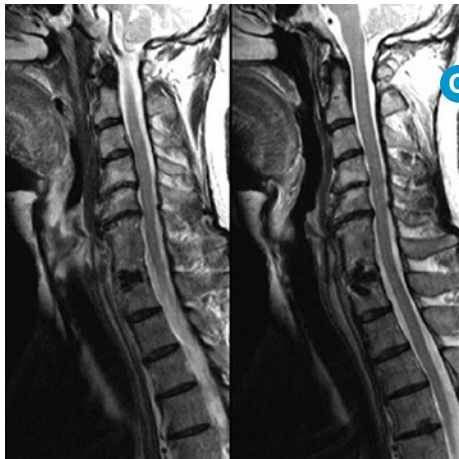


Time of flight angiography – HNV array

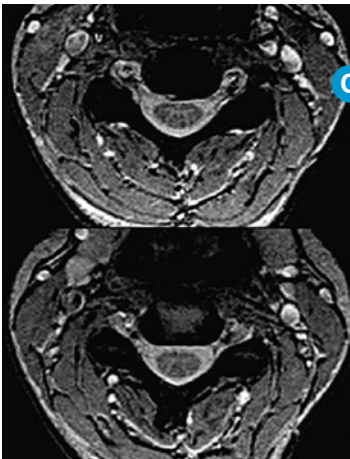
- A** Phased array head coil
- B** Head/neck/vascular coil array



T1 Cervical spine



T2 Cervical spine



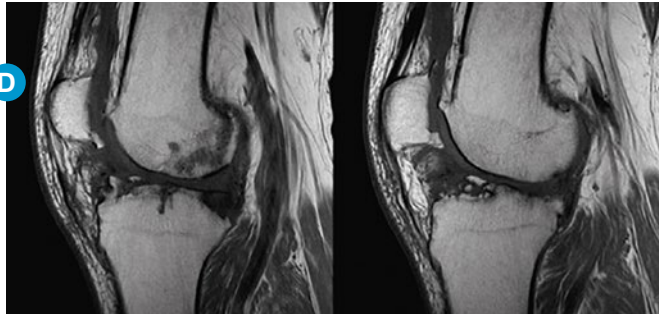
T2* Cervical spine



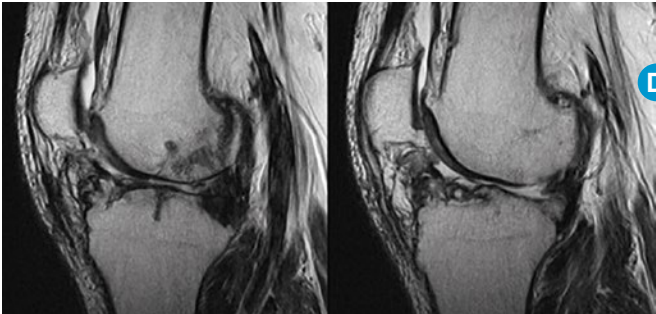
Thoracic spine – T2, T1 and FatSat



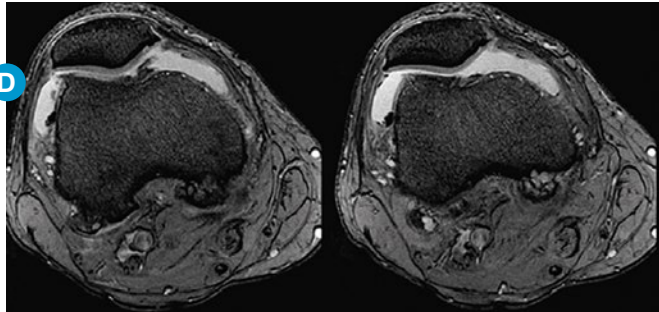
Lumbar spine – T2, T1 and FatSat



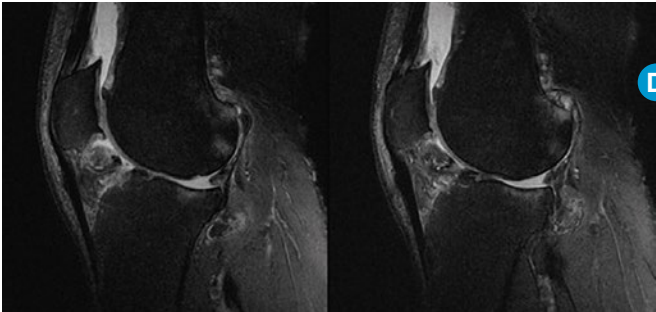
T1 Sagittal knee



T2 Sagittal knee

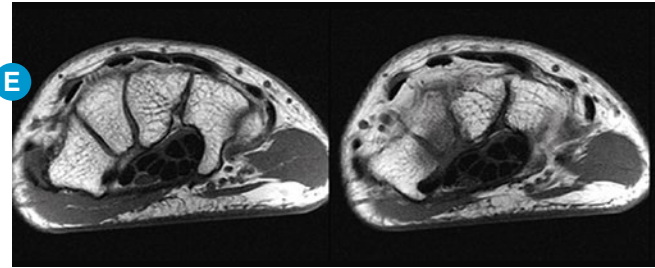


T2* Axial knee

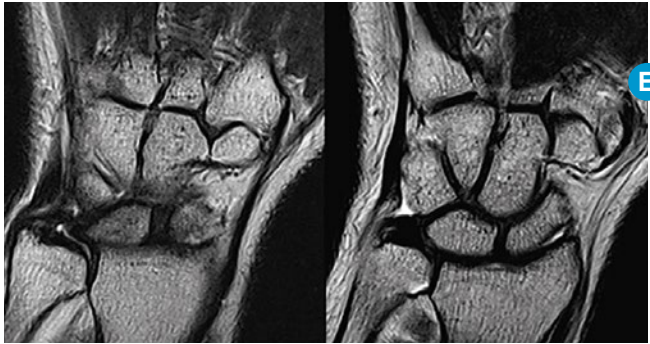


Proton density sagittal knee with FatSat

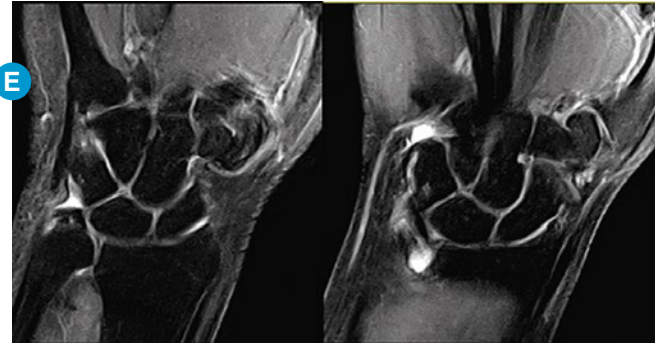
- C** Integrated spine array
- D** Phased array knee



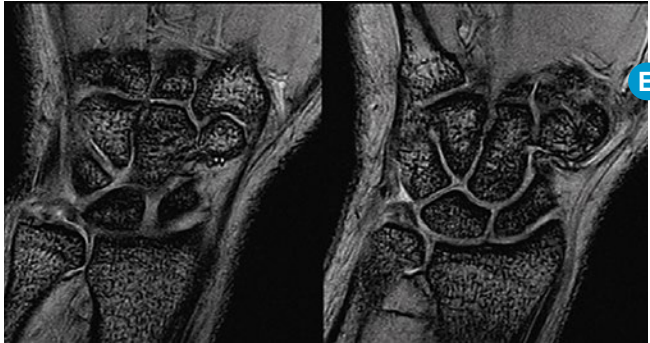
T1 Axial wrist



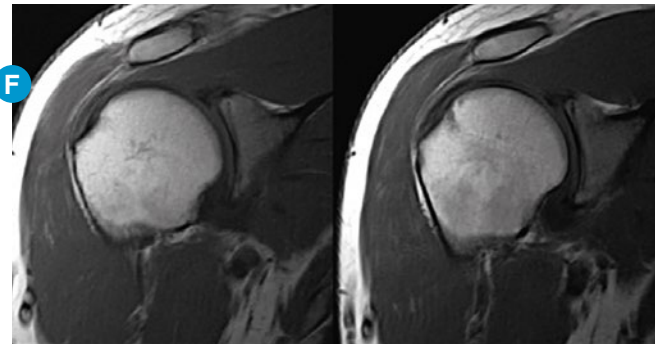
T2 Coronal wrist



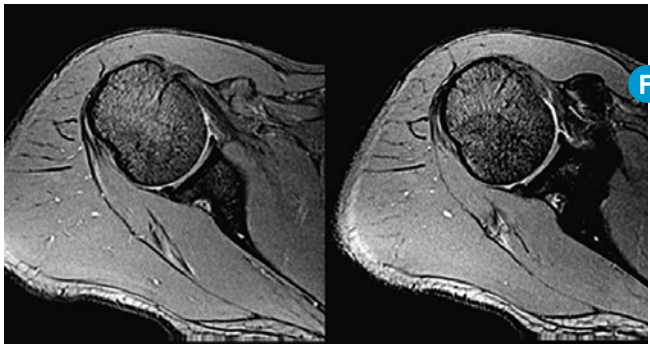
Proton density coronal wrist with FatSat



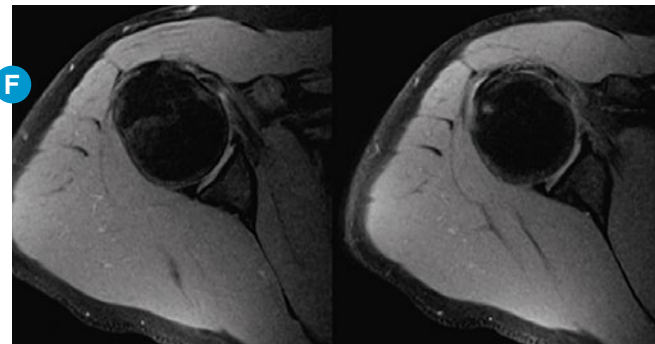
T2* Weighted coronal wrist



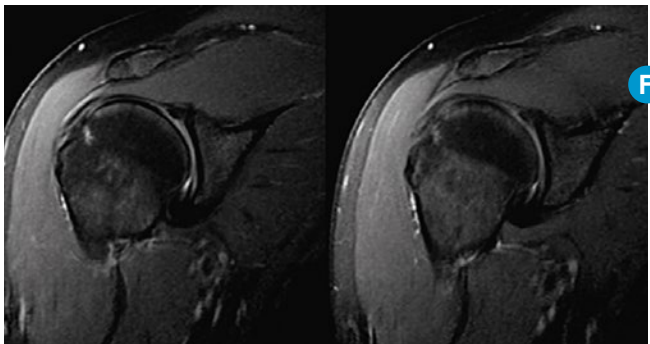
T1 Weighted coronal shoulder



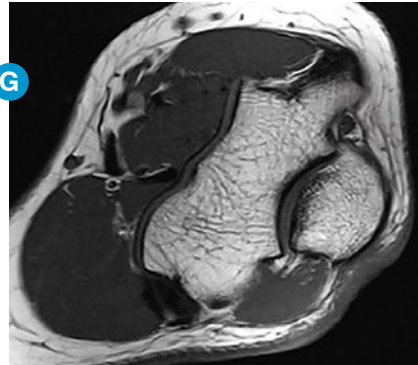
T2* Weighted axial shoulder



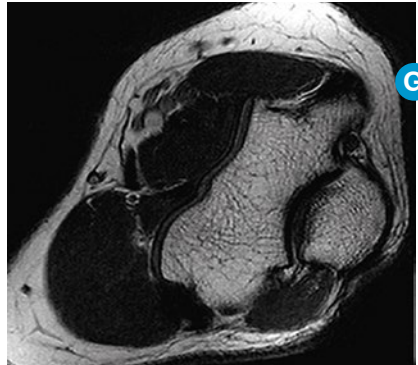
Proton density axial shoulder with FatSat



Proton density coronal shoulder with FatSat



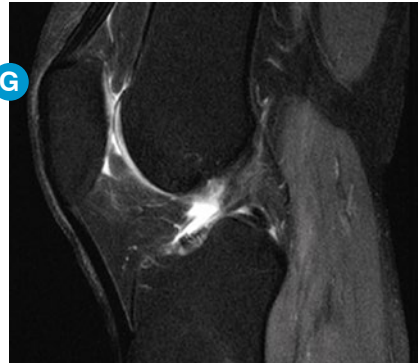
T1 Axial elbow – small flex



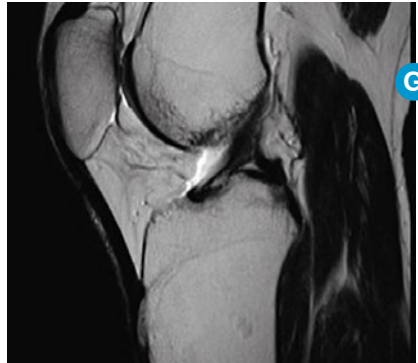
T2 Axial elbow – small flex



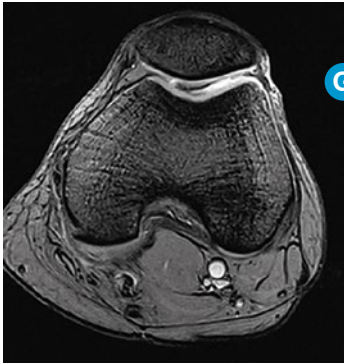
T2* Coronal elbow – small flex



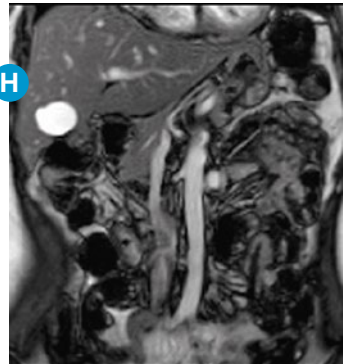
PD Sagittal knee w/FatSat – large flex



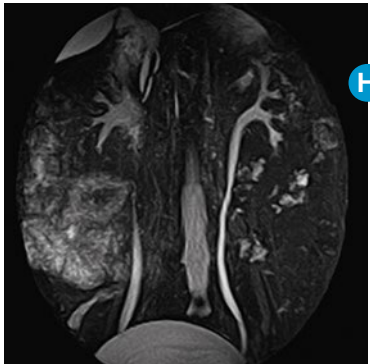
T2 Sagittal knee – large flex



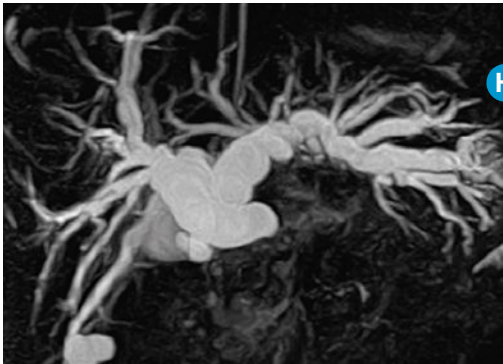
T2* Axial knee – large flex



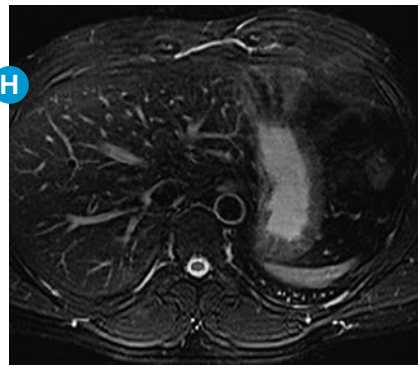
T2* Balanced abdomen



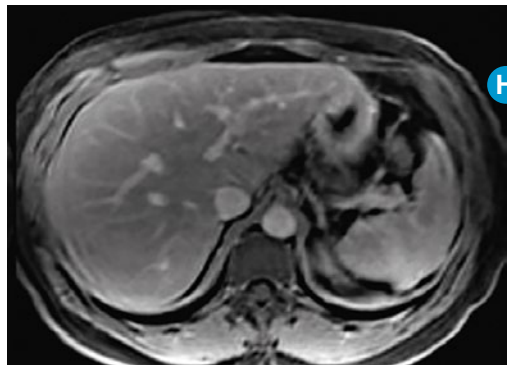
3D Single-shot fast spin echo MRU



T2 3D fast spin echo MRCP



T2 Abdomen with FatSat



3D T1 Axial abdomen with contrast

- E** Phased array hand/wrist
- F** Phased array shoulder

- G** Multiple purpose flexible arrays – small and large sizes
- H** Phased array torso coils – small, medium and large sizes

Product features

MAGNET

- Ultra-homogeneous main magnet field < 5 ppm over 45cm DSV
- Usable FOV of 50cm in all directions
- ZBO (zero boil-off) virtually eliminates cryogen consumption
- Recommended helium refill interval of ten years

USER INTERFACE

- Rapid start-up
- One-button plan setup
- High throughput protocols while retaining full user customization
- Integration to PACS and HIS / RIS systems via DICOM 3.0 protocols

RF SYSTEM

- Combination of integrated phased array high-density coil elements
- Four distinct coil arrays can be connected simultaneously for whole body imaging without repositioning

DATA ACQUISITION AND API

- 16-channel data acquisition system
- Latest generation parallel imaging (PPI) accelerates scan times while delivering the highest quality images
- Multiple phased array coils collect signals simultaneously



Advanced Software Applications

NEUROLOGY

Protocols for head and spine exams optimized for high resolution and SNR, including protocols for fast and postcontrast exams

- Advanced DWI**
- Multiple b values (5)
 - Multiple directions (21)
 - Auto ADC Maps
 - Single directional DWI
 - Average DWI Maps
 - Shorter ETL for improved DWI
 - Flexible PPI factors from 1.0 to 2.0

- Isotropic 3D T1**
- Shorter scan time with increased resolution
 - Reliable image quality

- DTI**
- Advanced Diffusion Tensor Imaging acquisition software for off-line processing



MUSCULOSKELETAL

Clinically optimized protocols for high resolution orthopedic exams
Full 50cm FOV for high-quality off-center imaging with homogeneous fat suppression

- MTC Plus T2* Flash**
- Orthopedic and spine imaging
 - Delivers excellent tissue contrast between cartilage, joint fluid, bone, muscles and ligaments

- Dedicated anatomical coils deliver high resolution and SNR in joint imaging**
- Dedicated and Multi-Purpose joint coils are available in a variety of sizes, specially designed to provide excellent image quality and flexibility with high resolution and SNR
 - Optimal coil placement directly on the anatomy, providing excellent image quality

BODY

Clinically optimized protocols provide comprehensive capabilities ranging from routine imaging to specialized imaging strategies unique to oncology
Ultra-fast breath hold protocols such as single shot, balanced and in- and out-of-phase optimized sequences
Optimized free breathing protocols for uncooperative patients
3D T1 protocols optimized for excellent spatial and temporal resolution in dynamic post-contrast exams
MR Cholangiopancreatography and Urography protocols
Multiple b-value DWI imaging for pathological differentiation

- Advanced Spectrum FatSat SPAIR/SPiR**
- Advanced pulse selection to produce consistent FatSat results for large anatomy imaging

Magnitude Recovery
T2 weighted imaging using a shorter TR
T2 weighting, contrast enhanced, with the use of Magnitude Recovery

- Partial Fourier Transformation (PFT)**
- 40 percent scan time reduction
 - Fast reconstruction
 - Support for Gradient Echo and Spin Echo sequences

In- and Out-of-Phase Imaging
In- and out-of-phase in one breath hold for spatial consistency

Balance / MF-SSFP
True steady-state ultra-fast GRE protocol for motion-free abdominal imaging

- Advanced Volume Imaging of Abdomen**
- Fast uniform fat suppression
 - Ultra short TR TE, very low FA, provides excellent T1 contrast
 - Fast 14- to 18-second scan time for breath-hold exams
 - Compatible with slice interpolation and PFT for high resolution and shorter scan times

- Body DWI**
- Rapid acquisition
 - Multiple b values
 - ADC map



ANGIOGRAPHY

Clinically optimized contrast or non-contrast angiography protocols for arterial and venous imaging
TOF 3D Multi-volume and 2D protocols with very high resolution for non-contrast angiography
2D fast bolus tracking interface for contrast enhanced angiography studies
Auto-MIP and background subtraction for optimal vessel visualization

- CE-MRA Package**
- Fast scan with very short TR and TE
 - K-space center filling
 - Automatic MIP processing
 - Automatic subtraction processing

- Interactive Bolus Detection**
- Interactive real-time scan and display
 - ROI signal intensity Auto-Switch
 - Manual-Switch
 - Subtraction for better bolus view
 - User-friendly interactive design



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