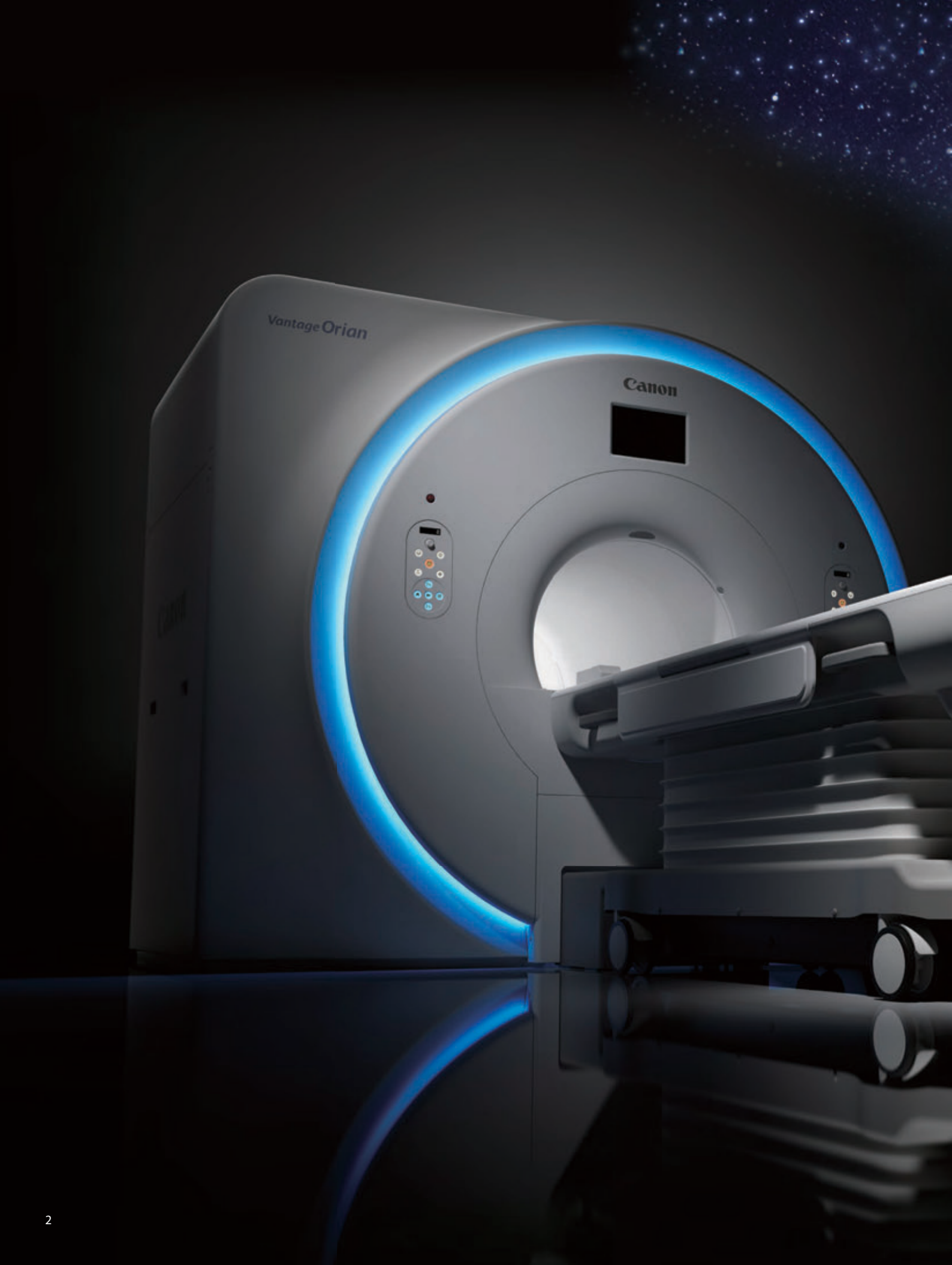
Canon



Vantage Orian

Productivity
Comfort
Confidence


Vantage Orian
Canon



High Productivity
Patient Comfort
Clinical Confidence

Designed to increase productivity and lower running costs, ensure patient comfort and deliver uncompromised clinical confidence, Vantage Orian is the perfect answer to your 1.5 Tesla MRI business and clinical requirements.

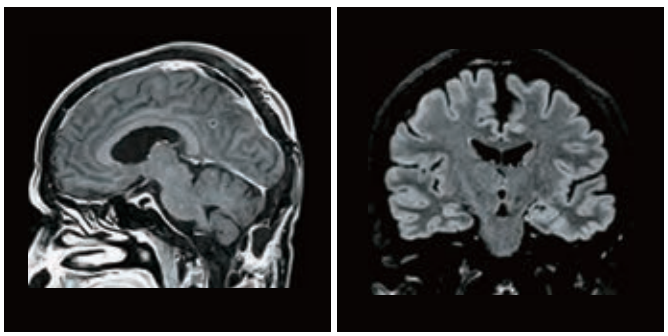
Intelligent new technology to advance productivity

Reducing scan time improves the patient experience and increases throughput. With intelligent new technology that advances our rapid scan technology, Vantage Orian delivers on a productivity promise that goes beyond expectations.

Fast 3D mode

New Fast 3D reduces scan times up to 50%[1] for different contrast weighted images while maintaining homogeneity and fat suppression.

1 As compared to standard FASE3D sequence



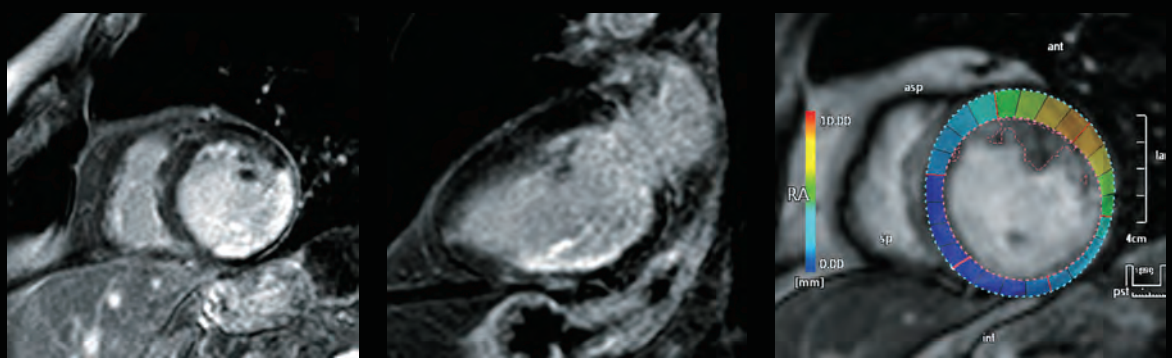
Post CE T1WI MPR FLAIR

Left: Courtesy of Dr. Hamamoto, Jichi Medical University Saitama Medical Center, Japan

"Fast 3D shortens imaging time while maintaining high quality images comparable to those offered by conventional techniques, contributing to work-flow improvements in routine medical care. It also delivers improved image quality without extending imaging time when compared to existing FASE3D."
–Dr. Kohei Hamamoto, Jichi Medical University Saitama Medical Center, Japan

k-t SPEEDER

Up to x8 accelerated k-t SPEEDER allows high frame rate cardiac cine and perfusion imaging with free breathing. k-t SPEEDER enables you to image a wide range of cardiac patients that have difficulty holding their breath for long periods of time.



" Cardiomyopathy revealed severe systolic dysfunction on k-t SPEEDER cine images. There was full-thickness late gadolinium enhancement of the entire inferior wall, inferolateral walls of the left ventricle"
–Dr. César Nomura, Instituto do Coração, Brazil

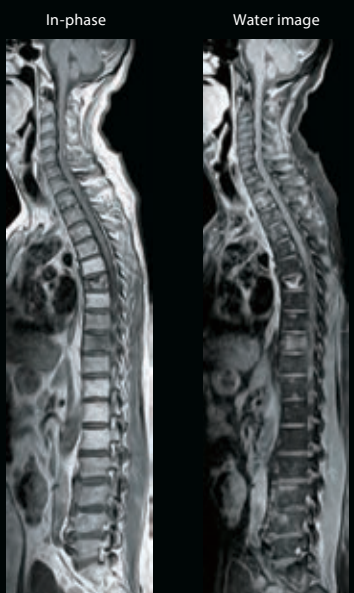
Courtesy of Dr. Nomura, Instituto do Coração, Brazil

FSE DIXON

The technology based on FSE2D achieves consistent fat suppression and homogeneity while acquiring four different tissue contrasts in one scan, reducing the total number of scans you need to acquire. Available for T1, T2, and PD sequences, FSE DIXON can be acquired in any area of the body.

"With FSE Dixon we have been able to achieve stable fat suppression which has improved the visibility of the lesion and as a result the scan time has become more efficient."
–Dr. Akihiko Arakawa, Department of Radiology, Saiseikai Kumamoto Hospital, Japan

Carcinomatous meningitis FSE DIXON with Contrast Enhanced



Courtesy of Dr. Arakawa, Saiseikai Kumamoto Hospital, Japan

Faster workflow means more focus on the patient

With the complexity of scan planning, achieving scan plane reproducibility can be challenging and time-consuming. EasyTech technology takes away the variability and helps you improve workflow with automatic slice alignment for neuro, spine, cardiac and now knees, standardizing your workflow with automatic positioning.



New Dockable Table

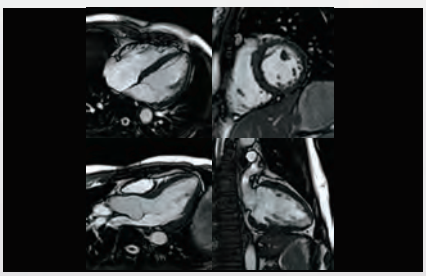
The new Dockable Table enhances workflow and provides easy patient handling allowing medical staff to respond to any patient requirement quickly and easily.

Productivity focused technology that improves workflow and image consistency

ForeSee View

ForeSee View is an essential new scan planning tool designed to allow you to preview your slice planning in real time. This tool is particularly useful in anatomies that can be difficult to plan such as the pancreas, the heart, and certain orthopedic joints. This excellent new feature reduces the need for re-scanning and saves time on scan planning for all body regions.









Intelligent Monitor

The intelligent gantry interface has been completely re-designed to enhance workflow and save set-up time, displaying important patient related and coil information, and allowing you to ensure a proper and complete setup without leaving the patient's side.





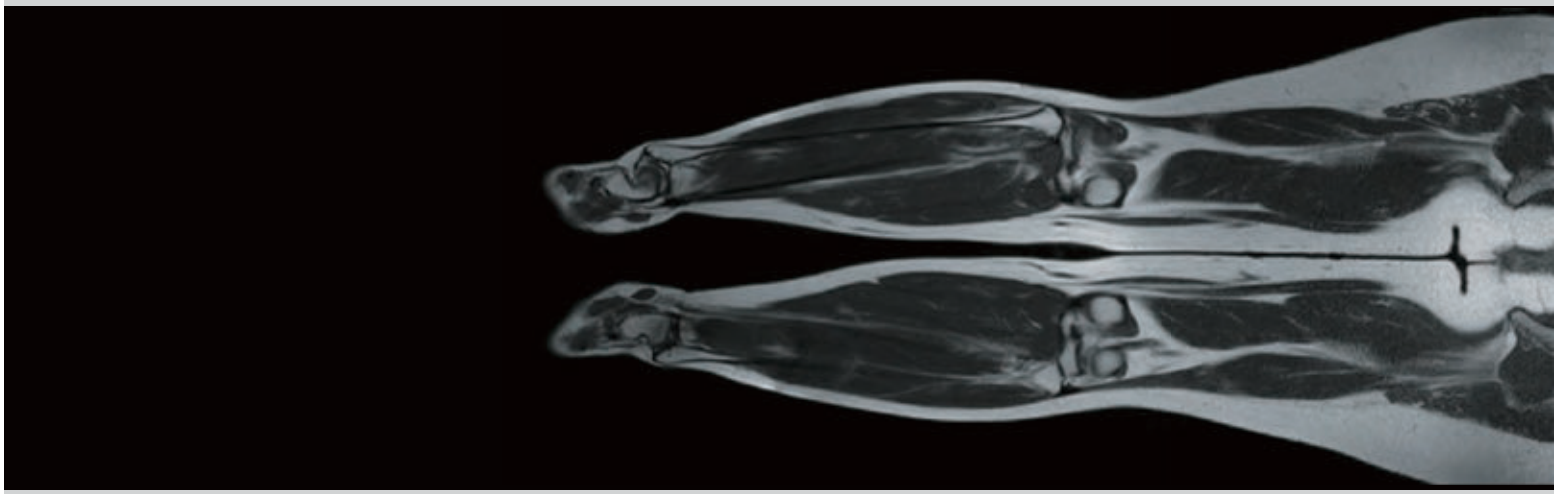
Outstanding imaging applications for every day performance

SUREVOI Knee and KneeLine+

SUREVOI Knee supports the accurate alignment of the knee to the iso-center which reduces artifact related re-scans. KneeLine+ improves reproducibility and image quality.

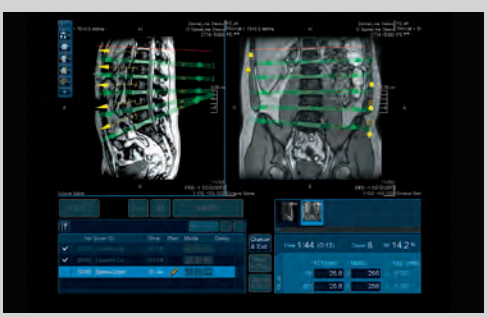




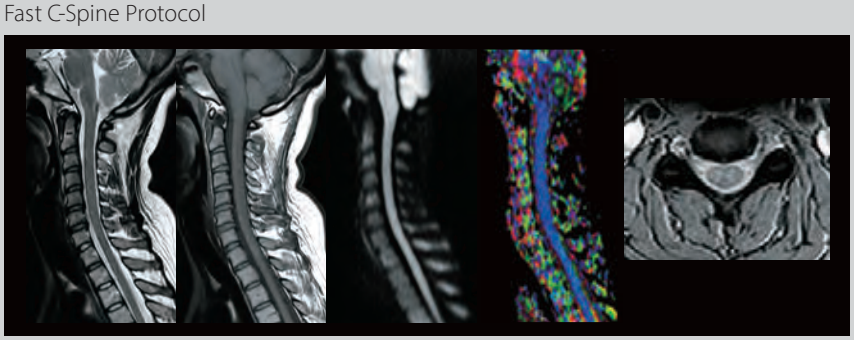


SpineLine+

With its auto-locator functionality, SpineLine+ allows you to plan spine studies quickly and easily. Sagittal and coronal locators allow you to set double-oblique slices, enhancing the reproducibility of follow-up exams.



Fast C-Spine Protocol



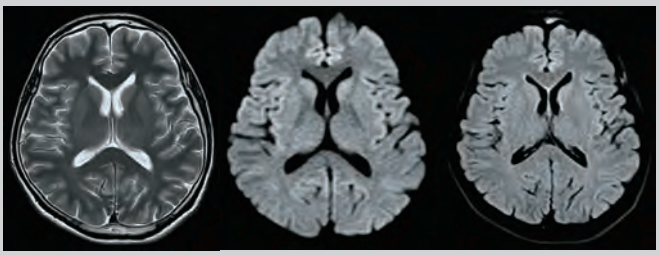
65 sec 51 sec 108 sec 132 sec

NeuroLine+

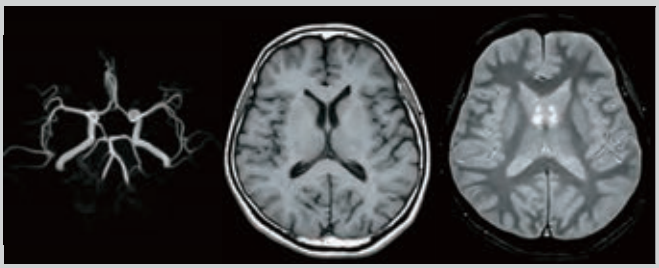
Achieve outstanding scan consistency for all your brain exams with NeuroLine+. The function's intelligent alignment algorithm allows you to automatically set up according to AC-PC or OM line.



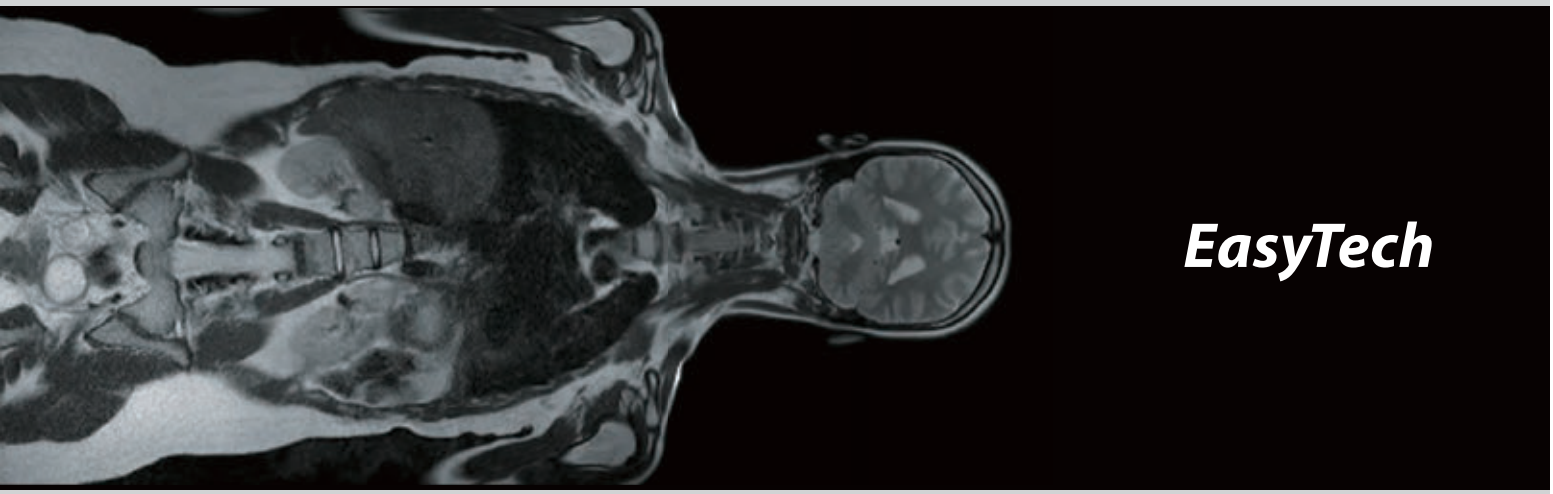
Fast brain protocol



36 sec 39 sec 40 sec

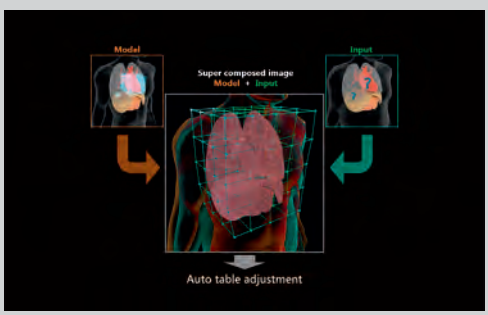


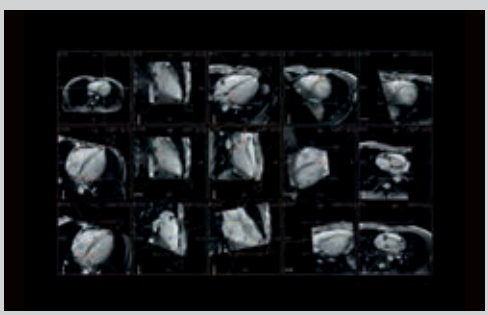
132 sec 62 sec 43 sec



SUREVOI Cardiac and CardioLine+

SUREVOI Cardiac automatically detects the location of the patient's heart and moves it to the center of the magnet where the homogeneity is the highest. CardioLine+ can then automatically detect 14 different standard views of the heart for quick workflow.



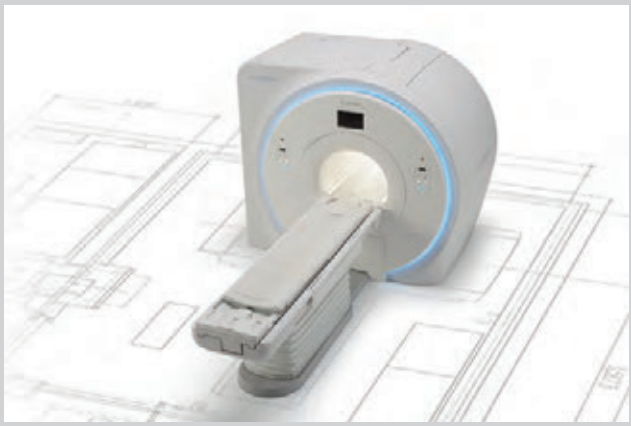


Total cost of ownership a smart investment choice

Combining a 71 cm wide bore with high end PURE RF and Saturn Technology migrated from our 3T portfolio, Vantage Orian packs everything you need into a 1.5T system with low energy consumption, a small footprint and dockable table for seamless patient handling.

ECO Space

Minimize investment in valuable floor space with a 25 m^2 footprint that excels in the 1.5T wide bore market.[2]



2 The 5 Gauss line is not confined within the Scan Room. Controlled access area should be taken into account by the facility when preparing for installation. The above specifications may not meet the local requirements such as for access as is required by the Americans with Disabilities Act in the United States. Please consult with your architectural and/or electric consultant for coding requirements. Some power equipment may be required to be placed in a dedicated electrical room.
The minimum footprint may not be applied to some cases depending on each site.



ECO Mode Plus

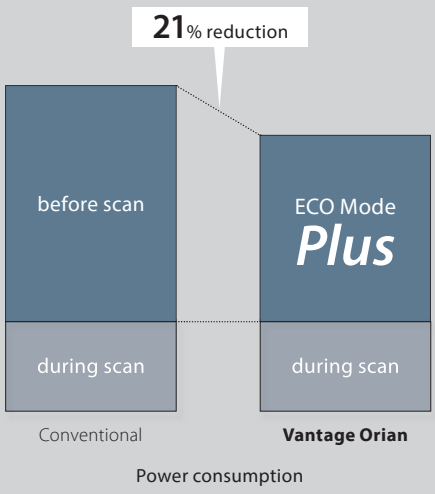
With new technology that automatically minimizes power consumption by up to 21% when the scanner is not being used with no effect on image quality.

ECO Table

ECO Table is automatically activated simply by lowering the couch to the home position (physically or at the console), when the dockable table is removed, or when the procedure is completed.

ECO Cooling System

Further reduces power automatically when the system is not operating through the intelligent operation of the cooling compressor.



Patient friendly features putting your patients first

Help your patients relax with MR Theater in a 71 cm wide bore, and deliver whisper quiet exams with Pianissimo and Pianissimo Zen.

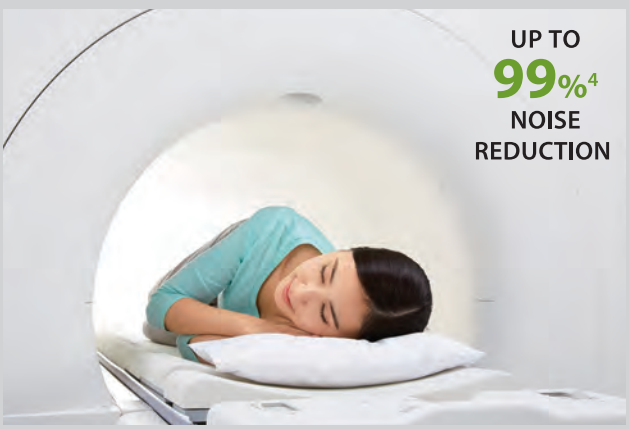
MR Theater and wide bore

The wide bore patient aperture and in-bore immersive virtual experience enhance patient comfort. The MR Theater encourages patients to relax and stay still, enabling clinicians to produce, high-quality imaging.



Pianissimo and Pianissimo Zen

Pianissimo technology significantly reduces the noise in and around the MRI environment for every patient, every sequence, every time. And Pianissimo Zen quiet sequences further reduce noise to just above ambient noise level, making exams even more comfortable and easier to complete.



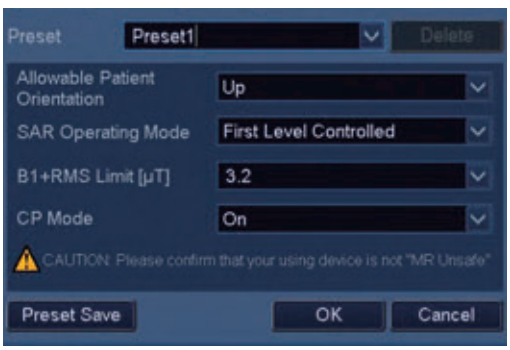
4 99% reduction by unit of Loudness level "dBA".

Address patient challenges

A range of features to ensure easier examinations for even the most challenging patients. With free breathing, contrast free and patient friendly coils, you can deliver a better patient experience and help expand your patient referral opportunities.

Limited Scan Mode

Limited Scan Mode allows you to control imaging parameters in real time while scanning challenging patients and save the input information as a preset for future examinations.



Non-Contrast MRA

An increasing awareness of the potential risks associated with gadolinium-based contrast agents has revealed the need for alternative, contrast-free MRA techniques. Non-Contrast MRA sequences minimize risk to patients with sensitivity to contrast while producing exceptional diagnostic images.



Courtesy of GIE Var Ouest, Ollioules, France

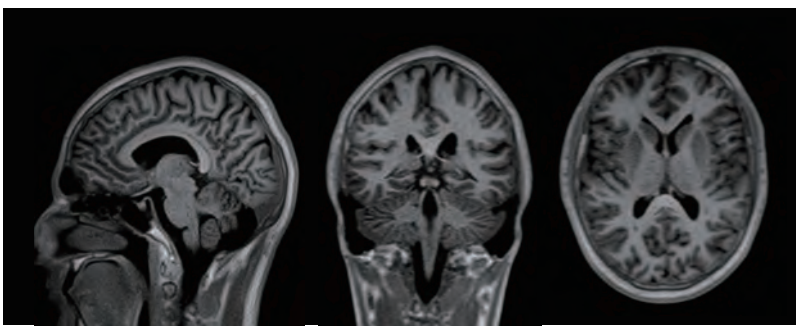
Patient friendly integrated coil technology - Up to 128

Canon Medical Systems' integrated coils make it easy to handle multiple studies by allowing you to position the patient and utilize the coils you need in one easy step. Along with our range of dedicated Atlas SPEEDER coils that enhance SNR, our range of flexible coils can be used on many hard to image body parts and patient sizes to help enhance images.

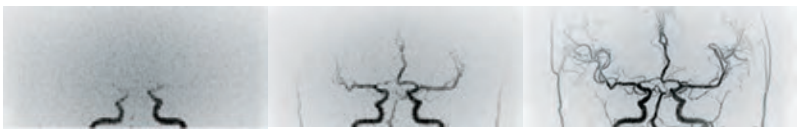
Quiet examination

Vantage Orian's mUTE[3] application suppresses high-speed gradient field switching, making it possible to provide even quieter scanning.

3 mUTE : minimized acoustic noise utilizing UTE



Sg 3D T1 Silent 1 mm isotropic TE=0.12 ms Cor MPR Ax MPR



Brain



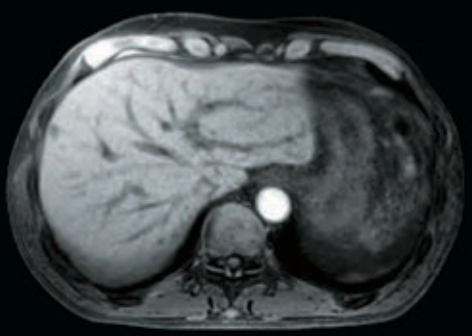
Expand your patient services

Expand your patient referrals as difficult to image patients can now be addressed with a range of new solutions

Quick Star free breathing

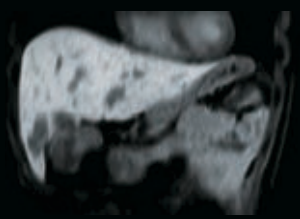
Quick Star free breathing and motion reduction can be helpful for challenging patients that have difficulty holding their breath, especially for liver examinations or uncooperative patients like pediatrics.

"Quick Star allows us to obtain high resolution 3D T1 WI with free breathing and is very useful for visualizing the lesion in the abdominal area of the patient who has difficulty to hold their breath.
–Dr. Hamamoto, Jichi Medical University Saitama Medical Center, Japan





Quick Star free breathing

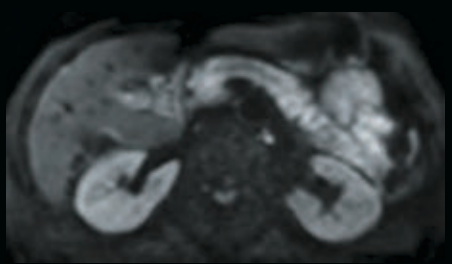


MPR imaging

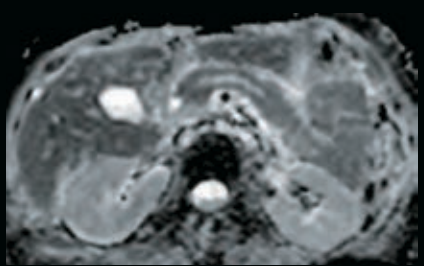
Courtesy of Dr. Hamamoto, Jichi Medical University Saitama Medical Center, Japan

MultiBand SPEEDER

MultiBand SPEEDER acquires multiple slices simultaneously, which enables reduced scan times. DWI scans in particular can be acquired in about half the time compared to previous sequences.



DWI b800



ADC map

Courtesy of Clinica Creu Blanca, Spain

"MultiBand Diffusion Sequence has reduced our clinical scan times by half compared to the traditional Spin Echo Diffusion for Abdominal Regions. Moreover, the new multiband sequence has helped reduce artifacts in areas of high susceptibility such as air and bone while overall improving ADC maps."
–Dr. Xavier Alomar, Clinica Creu Blanca, Spain

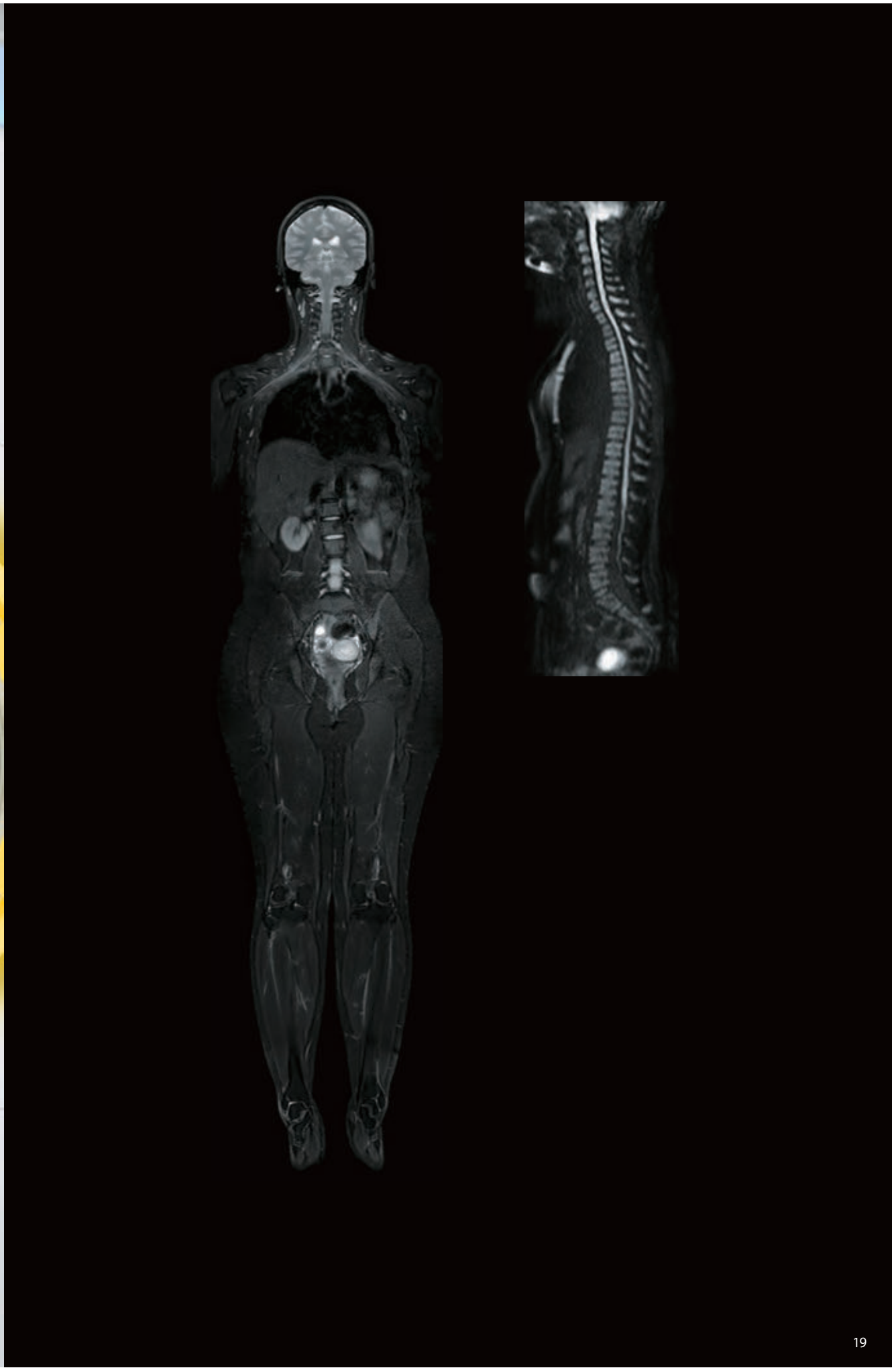
Utilize premium technology to boost clinical confidence

With advanced new hardware delivering stable and reliable imaging, Vantage Orian enhances clinical confidence. With a Gmax[4] of 45 mT/m and SR[5] 200 T/m/sec[6] achieve enhanced signal to noise and high resolution imaging for advanced MR examinations such as Cardiac, Neuro and Angiography.

4 Gmax : Maximum Gradient amplitude
5 SR : Maximum Slew rate
6 Optional gradient subsystem allows 34 mT/m and 155 T/m/sec




T/m
/sec



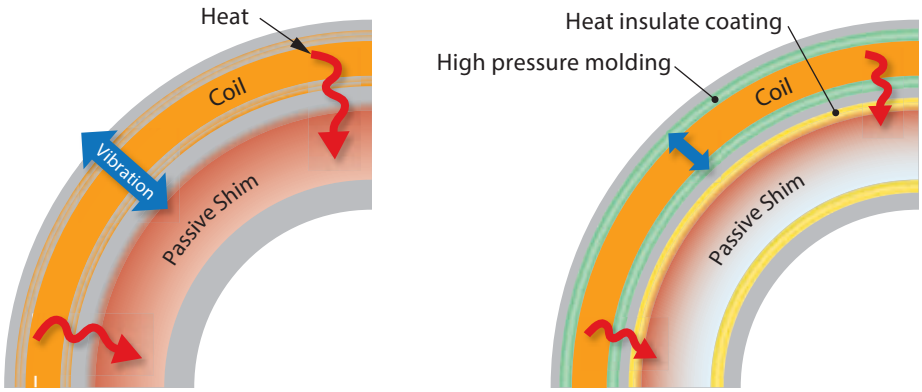


Consistent imaging

Be a leader of MR imaging and be confident that you are offering the best 1.5T MRI patient technology available. With new and migrated PURERF and Saturn Technology, Vantage Orian delivers stable and consistent imaging performance from patient to patient, across body regions and through a range of advanced applications.

Saturn Technology

Our unique Saturn Technology provides more consistent image quality through increased gradient stability and precise center frequency control.



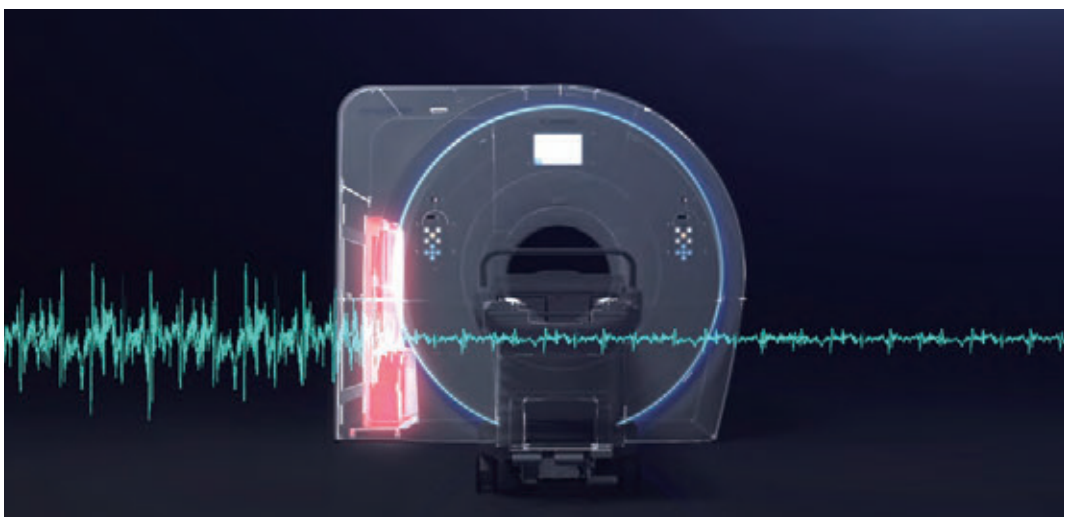
Conventional

Saturn Technology

Compared with a conventional structure, Saturn Technology's high pressure molding produces less signal blur and provides crisper images, while the heat insulate coating suppress temperature increases under high loads, leading to more stable image quality over a longer period.

PURERF Rx

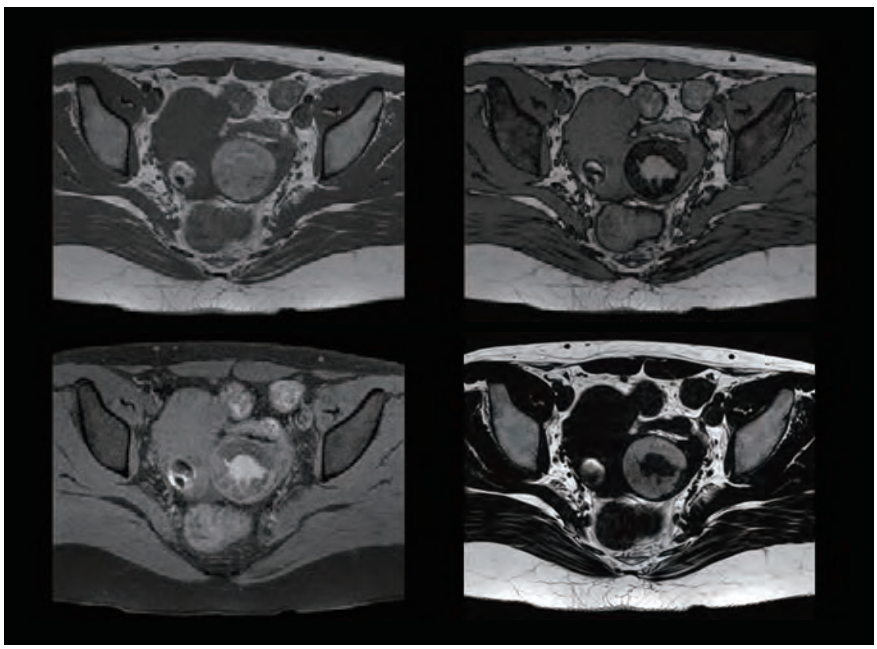
Adaptive noise cancellation PURERF Rx technology employs a proprietary algorithm and reduces noise at the source. The result is an increase in SNR up to 38% and enhanced image quality.




Canon
Auto Home

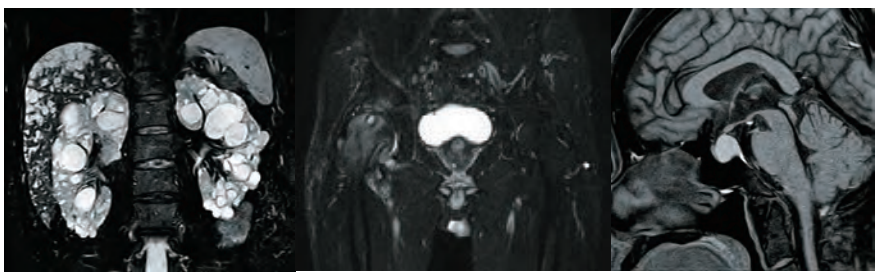
Quick and consistent imaging

Vantage Orian redefines clinical confidence with excellent image consistency across all procedures. Achieve excellent MRI diagnostic services with high quality and stable output, enhancing imaging capabilities for your patients and your business.



FSE DIXON T1WI

FSE DIXON yields 4 different contrasts in a single scan to save time which can effectively cut scan time in half when both standard (un-fat suppressed) and fat-saturated images are acquired in the same plane.



Water image T2WI | Water image T2WI | Water image T1WI

Courtesy of Dr. Arakawa, Saiseikai Kumamoto Hospital, Japan

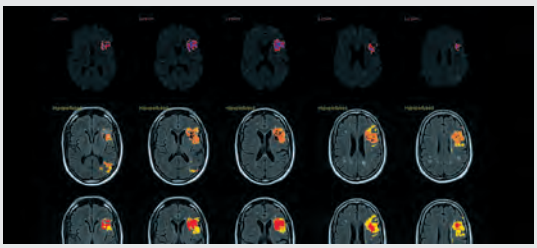
"Since FSE DIXON can shorten scan time, it can reduce patient burden and improve the examination efficiency."
–Mr. Takeshi Ohta, Radiographer, Department of Radiology, Saiseikai Kumamoto Hospital, Japan

Advanced post processing enhances diagnosis while helping to expand patient services

Access advanced applications with Olea/Vitrea™ post processing tools.

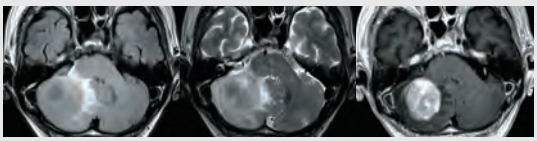
Stroke analysis

Complete post-processing solution for stroke care with automatic mismatch assessment and volume computation.

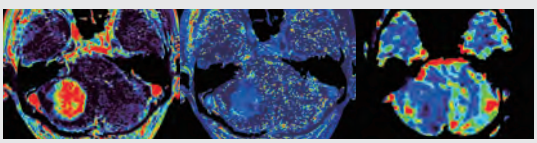


Permeability analysis

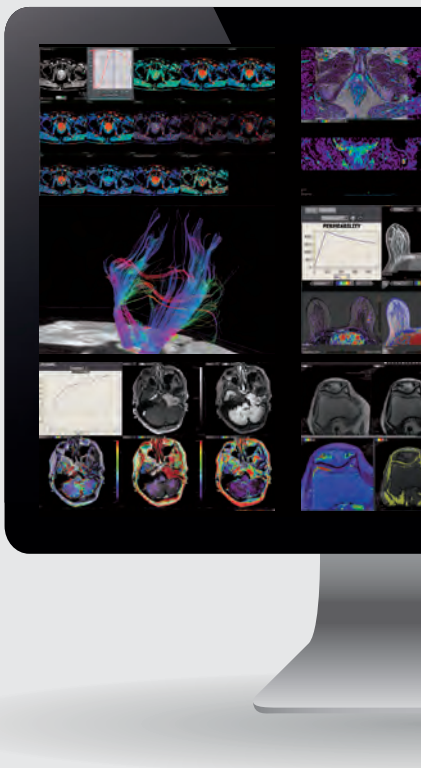
Automatically and accurately computes qualitative and quantitative permeability maps.



FLAIR T2WI Post CE



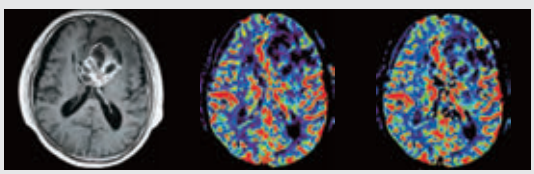
K^{trans} Kep Blood volume



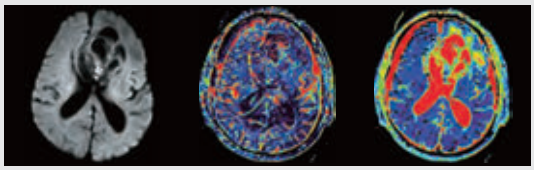
Courtesy of Fujita Health University Hospital, Japan

Perfusion and IVIM

Perfusion automatically and accurately computes perfusion maps.
IVIM automatically quantifies micro-perfusion with diffusion only or computes non-acquired diffusion b-values.



Post CE CBF rCBV with leakage correction



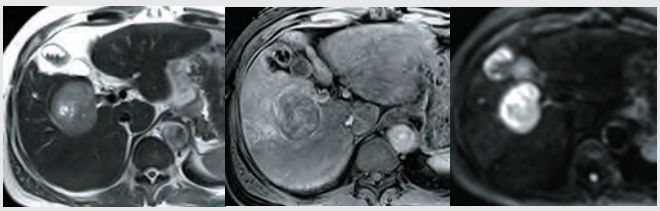
DWI F^{7}: 0.06 D^{8}: 0.79

7 Vascular volume fraction
8 Molecular diffusion restriction coefficient

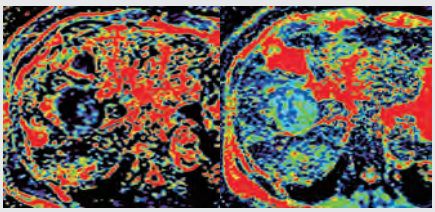
Courtesy of St. Marianna University School of Medicine, Japan

Bayesian IVIM

Bayesian-based method provides a rigorous probabilistic estimation of parameters. It is fully adaptive, delay-insensitive and highlighted better results than other methods.

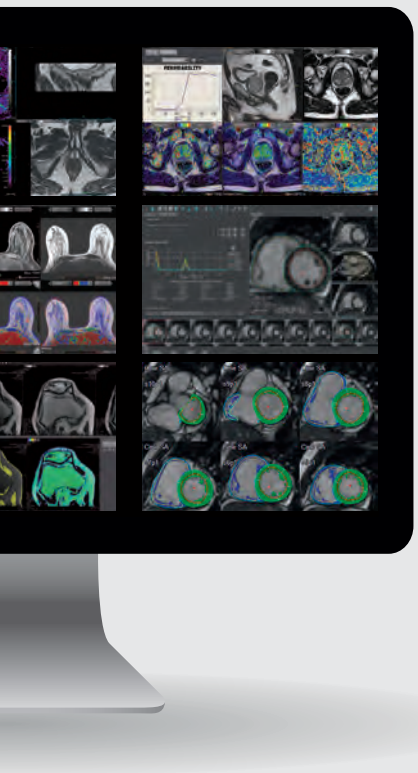


T2WI | Dynamic Arterial phase | DWI



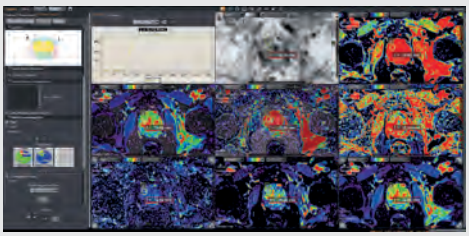
F^{9} : 0.08 | D^{10} : 0.79

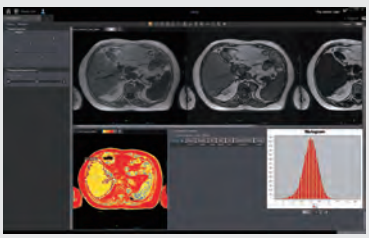
Courtesy of St. Marianna University School of Medicine, Japan

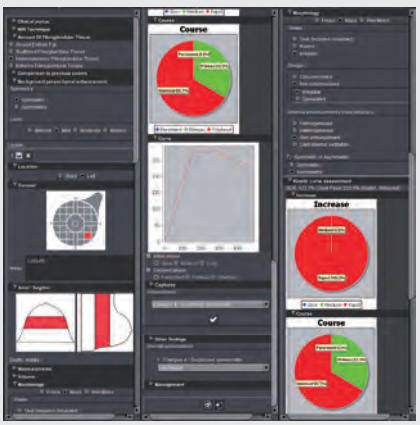


Dedicated automatic reporting

Stroke, prostate (PI-RADS v1 and v2) and breast (BI-RADS) automatic compliant reports.



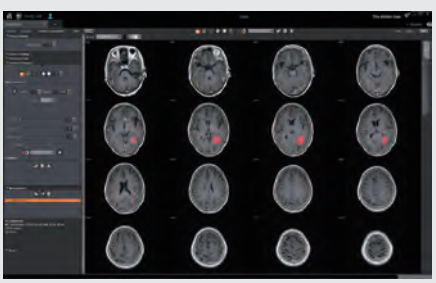


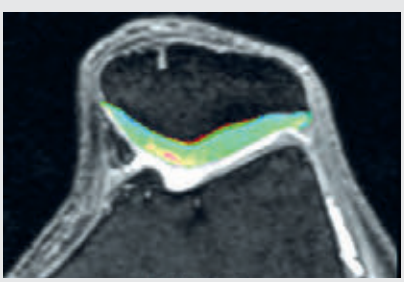




Volume segmentation

Automatic or semi-automatic segmentation tools to compute volume of interests from various anatomical areas such as cartilage or brain.

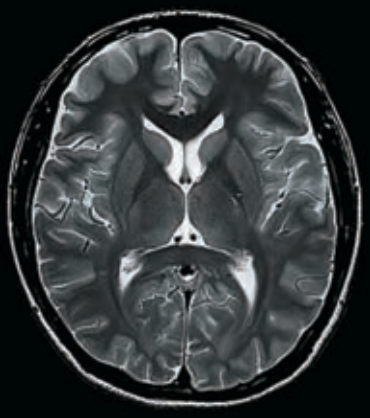




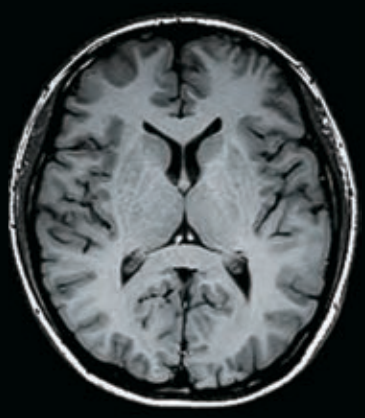
Olea MEDICAL

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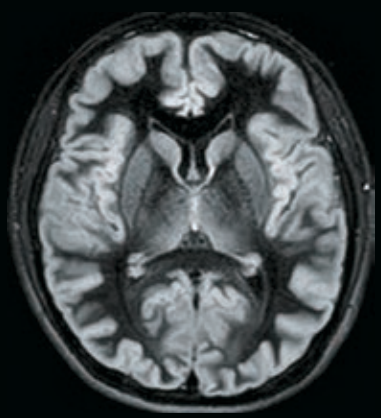
Image Gallery



Ax T2



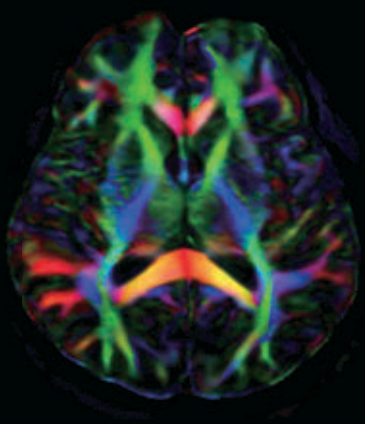
Ax T1



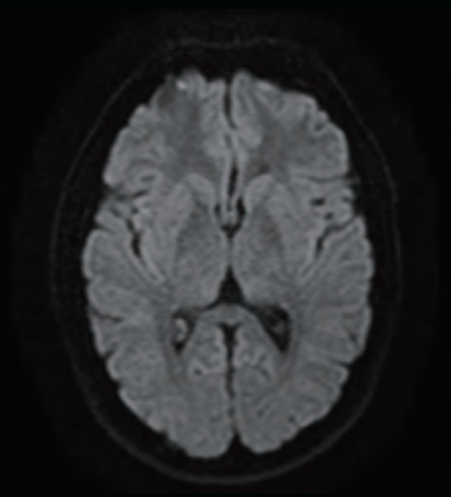
Ax DIR



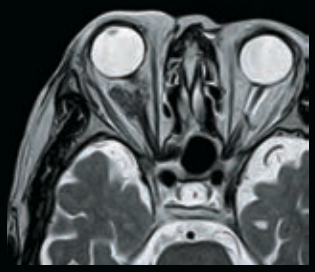
3D TOF



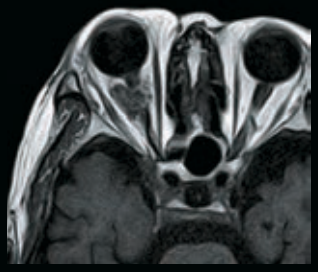
FA map



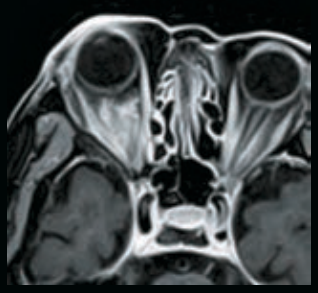
Iso DWI



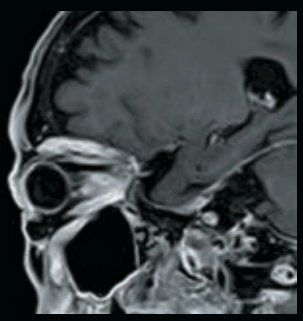
Ax T2



Ax T1

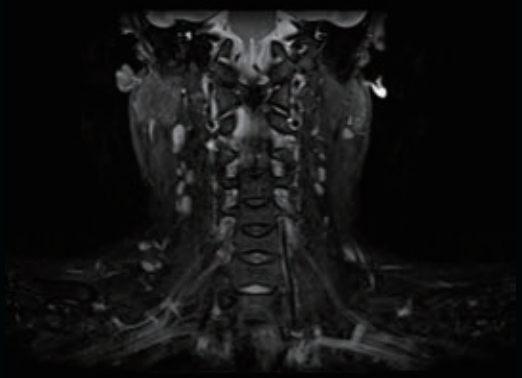


Ax 3D T1 Post contrast enhancement

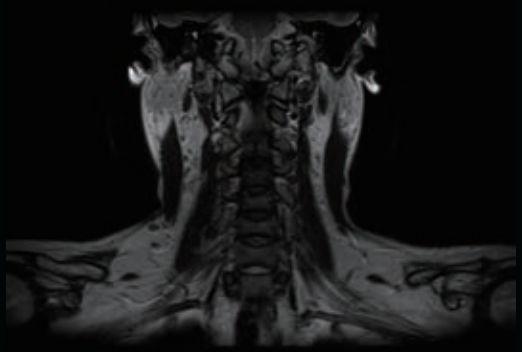


Sg MPR

Courtesy of Dr. Hamamoto, Jichi Medical University Saitama Medical Center, Japan



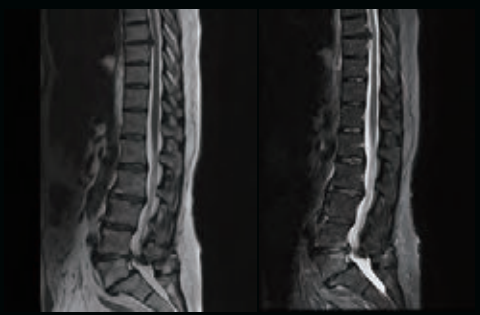
Co T2 FSE DIXON Water



In Phase

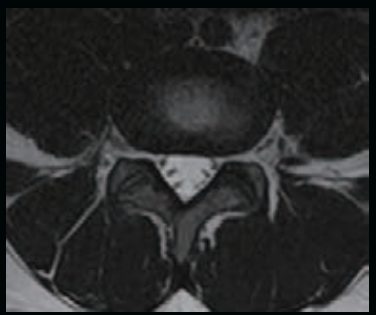


3D TOF

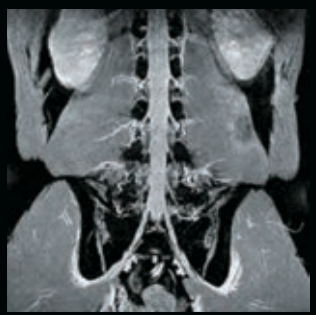


Sg T2

Sg STIR



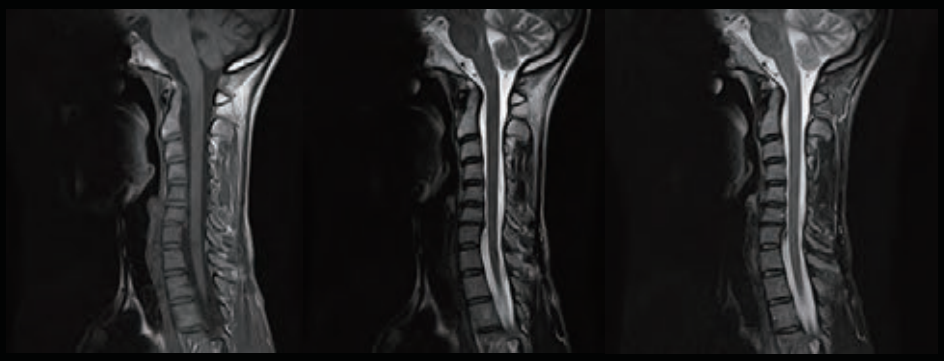
Ax T2



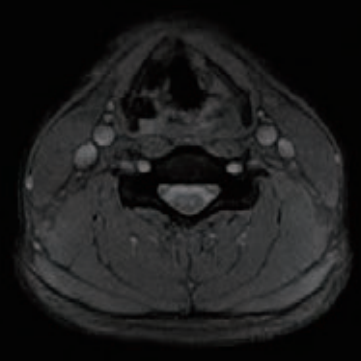
Co FFE3D T2*

Courtesy of GIE Var Ouest, Ollioules, France

Image Gallery

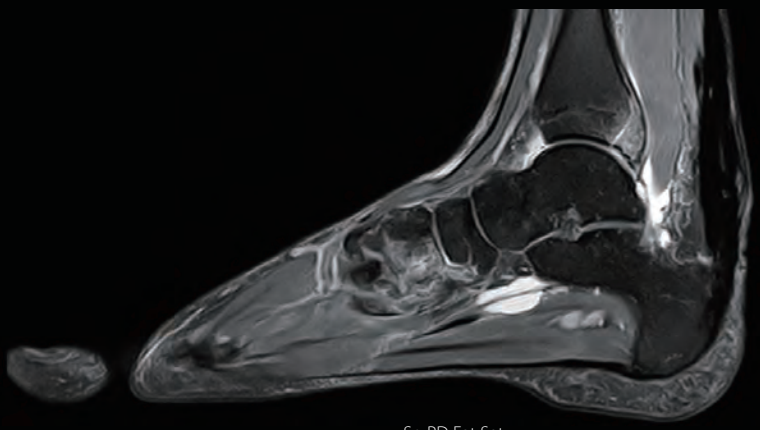


Sg T1 | Sg T2 | Sg STIR

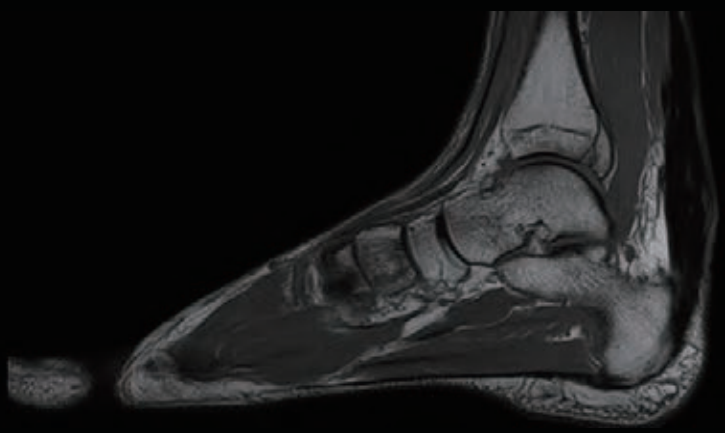


Ax 3D T2*

Courtesy of GIE Var Ouest, Ollioules, France



Sg PD Fat Sat

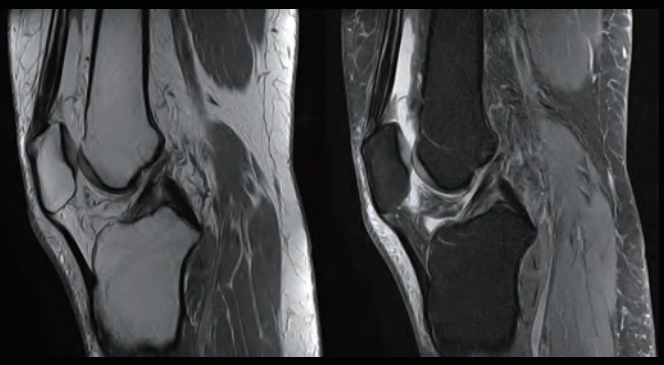


Sg T1

Courtesy of GIE Var Ouest, Ollioules, France

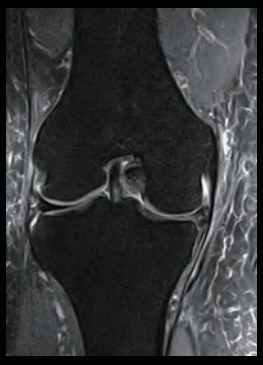
Sg PD FSE DIXON

Co PD Fat Sat

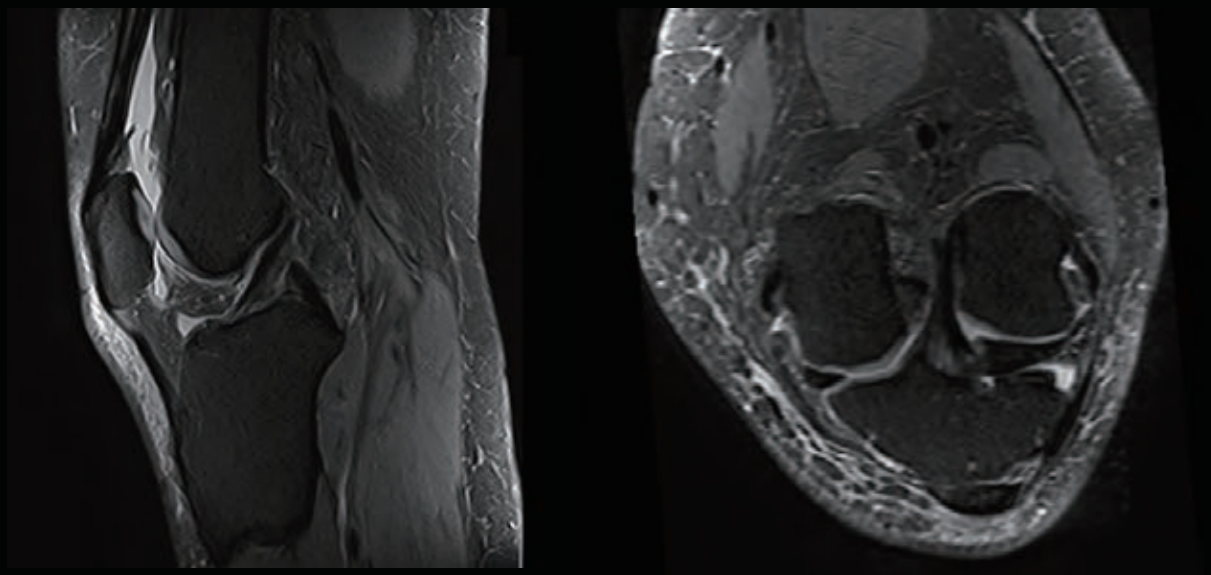


In Phase

Water



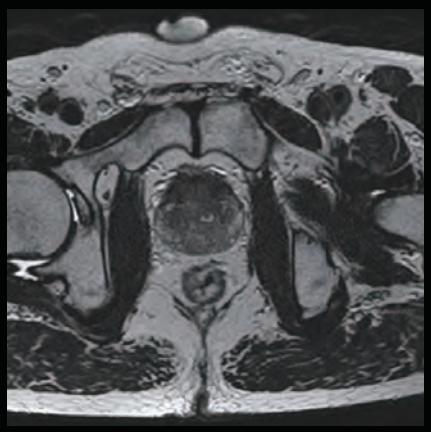
Courtesy of GIE Var Ouest, Ollioules, France



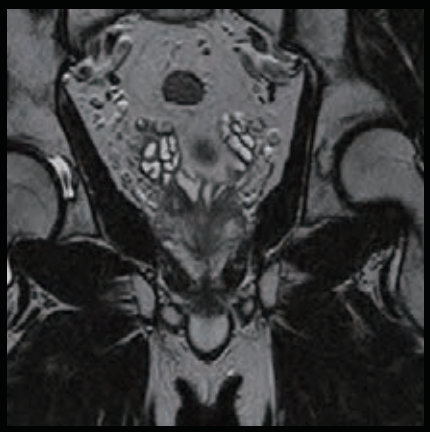
Sg 3D PD FS 0.6 x 0.7 x 0.7 mm ACL Double oblique MPR

Courtesy of GIE Var Ouest, Ollioules, France

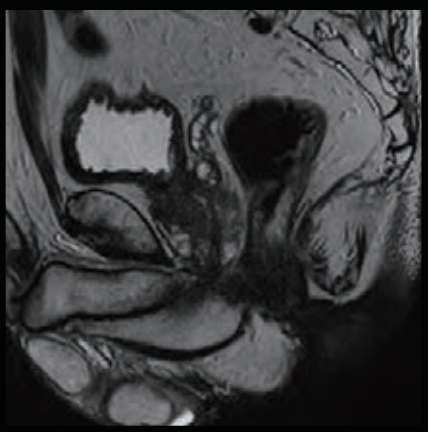
Image Gallery



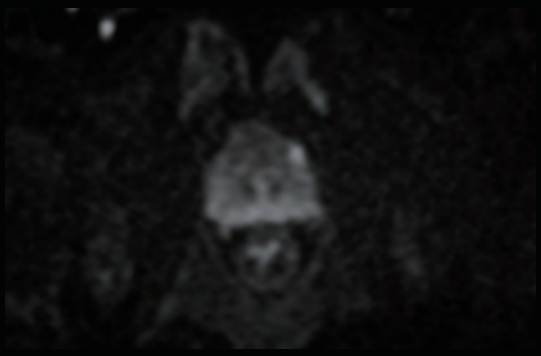
Ax T2



Co T2



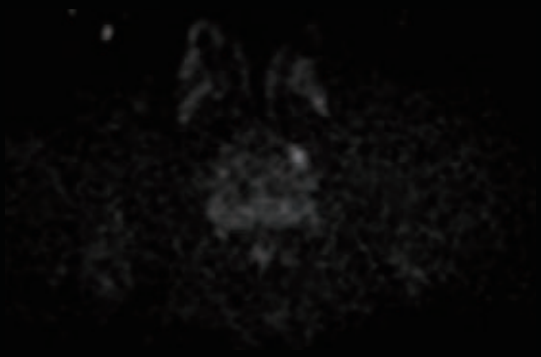
Sg T2



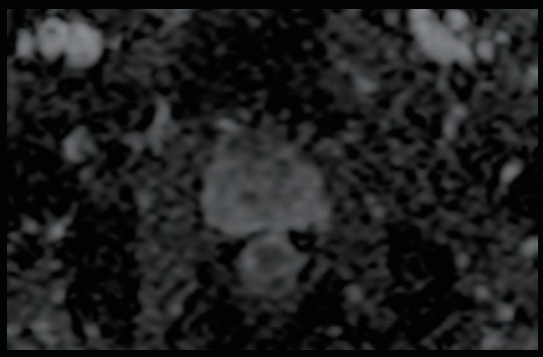
Ax DWI / b1000



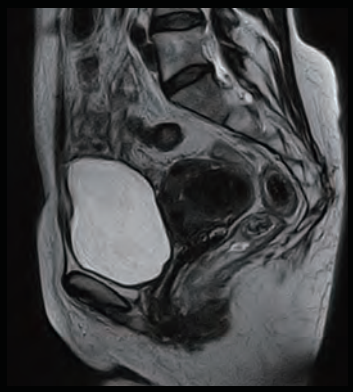
Ax DWI / b1400



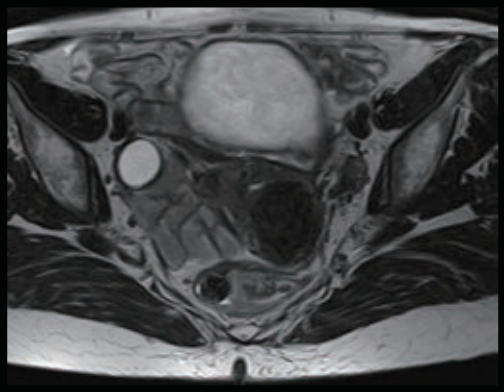
Ax DWI / b2000



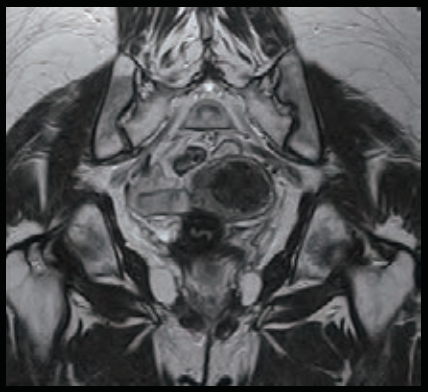
ADC map



Sg T2



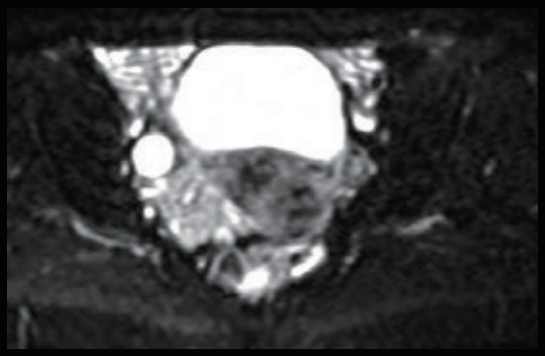
Ax T2



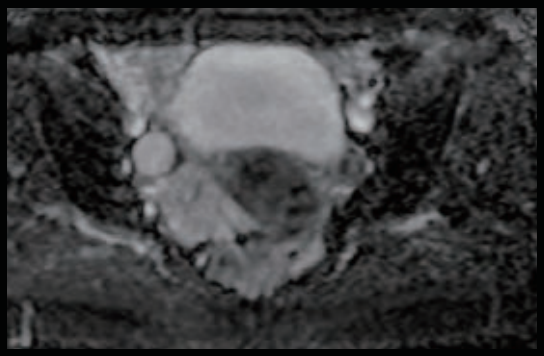
Co T2

Courtesy of GIE Var Ouest, Ollioules, France

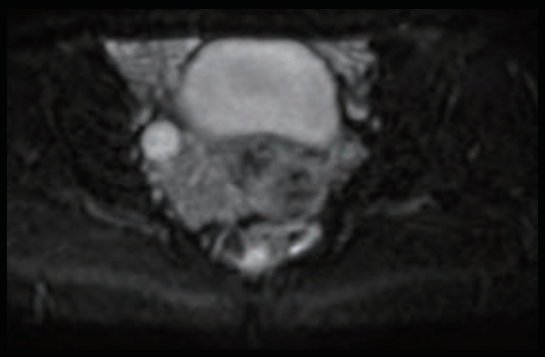
Ax DWI



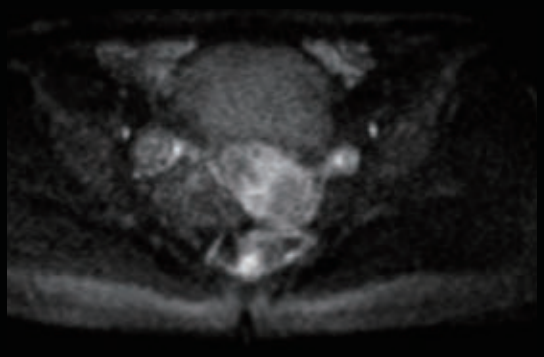
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ADC



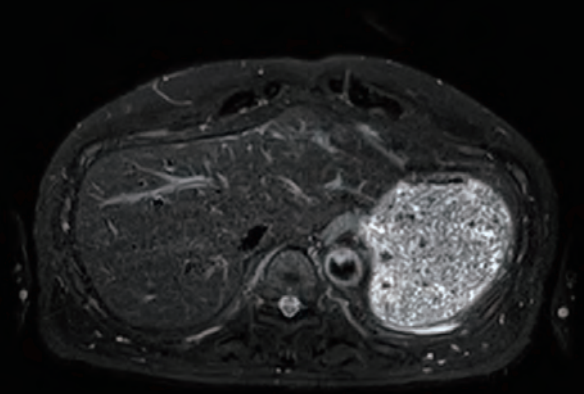
cDWI b400



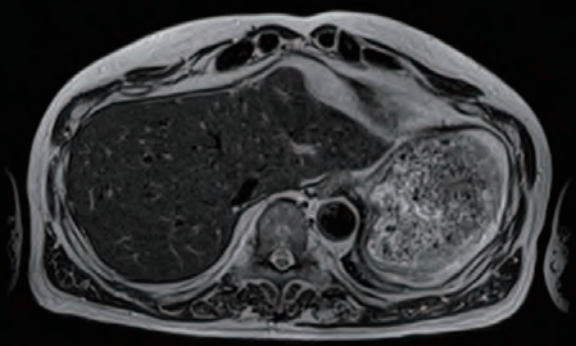
b1000

Courtesy of GIE Var Ouest, Ollioules, France

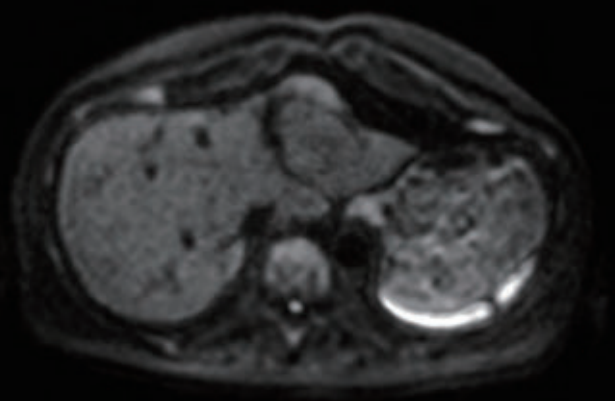
Image Gallery



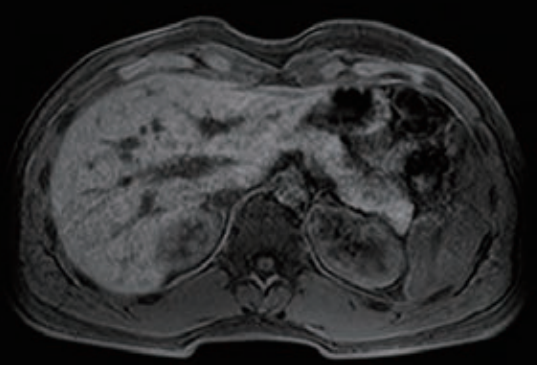
Ax T2 Fat Sat



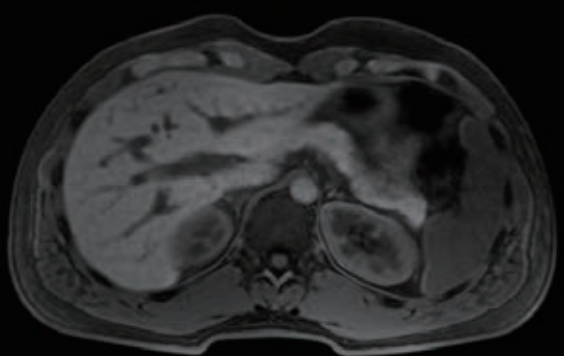
Ax T2



Ax DWI / b800

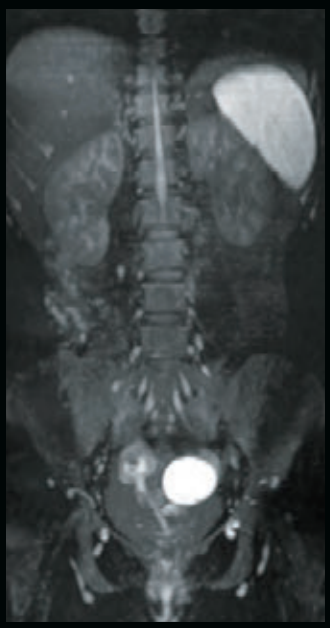


Conventional
Ax FFE3D Fat Sat free breathing

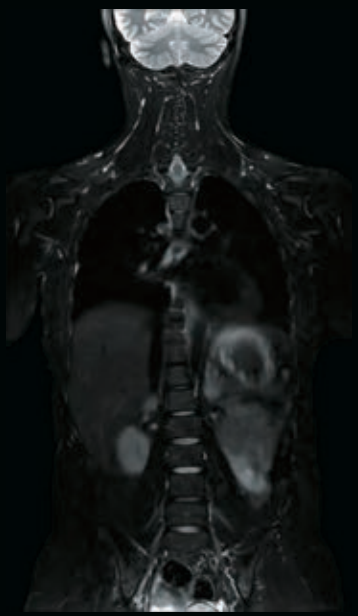


Ax Quick Star Fat Sat free breathing

FSE DIXON water image



Body DWI 4min x 2 steps



T2WI



T1WI





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And most importantly, stable and consistent imaging performance is delivered through our unique PURERF and Saturn Technology, increasing diagnostic confidence for both the physician and the patient.

High Productivity

- Rapid scan technologies reduce scan time
- Dockable Table assists in seamless patient handling
- Low energy consumption minimizes running costs

Patient Comfort

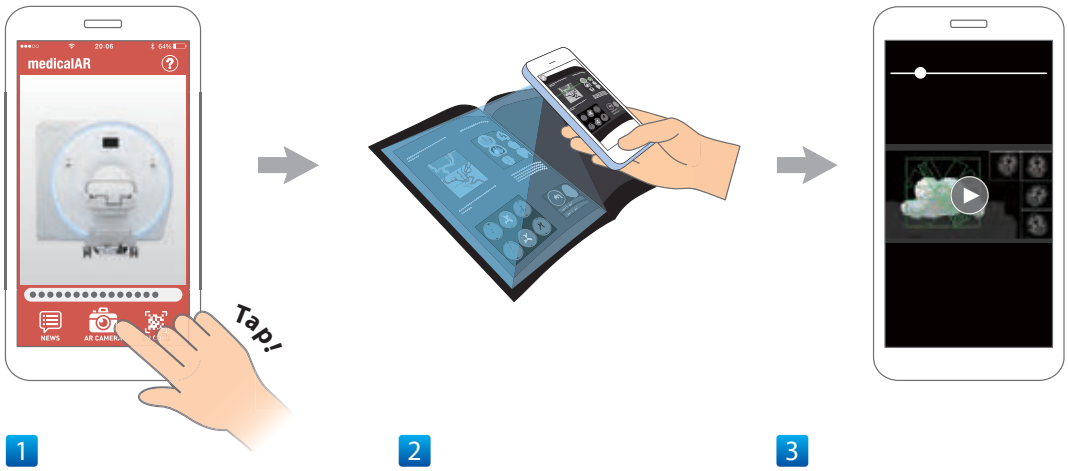
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- High resolution imaging with Saturn Technology
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