

# CARING DESIGN. ADVANCED PERFORMANCE.

Optima<sup>\*</sup> MR360 1.5T Advance



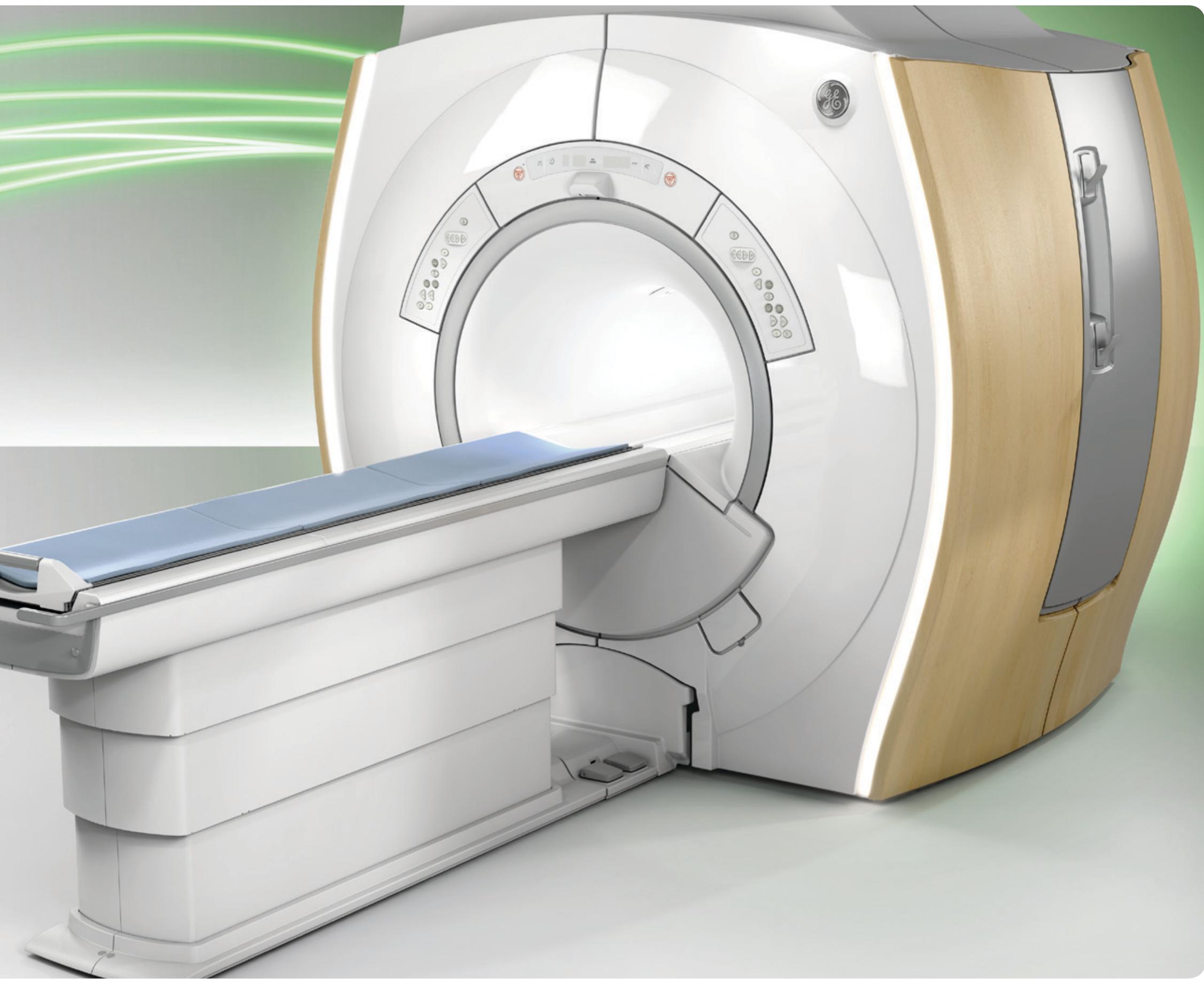
**"IT JUST LOOKS  
COMFORTABLE.  
THE WARM LIGHT  
IS ALLURING."**

- Optima MR360 Advance [product manager](#)

Every piece of equipment you own represents a balance of technology and design. The Optima MR360 Advance not only exemplifies this philosophy, it takes it further. We've brought into balance the advanced MR platform you trust with the flexibility and efficiency you need. And that's just the beginning.

See how the Optima MR360 Advance gives you exceptional 1.5T performance, a comforting design and 18 new clinical applications to keep your diagnostic capabilities moving forward.





# CARING DESIGN.

## MR IN A NEW LIGHT.

Sometimes something as simple as a light, such as the sophisticated lighting on the Optima MR360 Advance, can be enough to get people's attention. This small, but important design choice represents our focus on the human element in MR.

Using the symbol of caring hands as our inspiration, the Optima MR360 Advance was designed to be welcoming to the patient and intuitive for the technologist.

For the patient, we developed the Needle-Free Suite of MR applications. Whether it's assessing whole liver parenchyma non-invasively, capturing arterial and venous flow in fine detail without contrast or correcting for patient motion to potentially reduce the need for sedation, we're focusing on the way MR should be – obtaining clinical results through non-invasive exams.

For the technologist, we designed our Express Suite coils to help eliminate the need for repositioning between scans. We've also adjusted our table design to easily adapt to the patient's height. And for those who require faster mobility for emergency patients, we also have a detachable table option.

The result? Excellent diagnostic confidence enabled by an MR system that is inviting to patients and user-friendly for technologists.





**"**We designed the Optima MR360 Advance with one thing in mind, the human element. This focus created a new direction for us and should influence the next generation of our products for years to come. **"**

– Optima MR360 Advance lead designer

# ADVANCED PERFORMANCE.

## OPTIX TECHNOLOGY EMPOWERED.

With premium technologies like Optical RF, energy-conscious gradients and upgraded processors inside, the Optima MR360 Advance puts you at the forefront of MR technology with a system platform you can rely on. Experience what advanced performance is like by efficiently managing patient volumes and accelerating your local care.

### Homogeneous magnet

At the heart of the Optima MR360 Advance is our same proven, highly homogeneous magnet (typical ppm <0.06 ppm @ 30 cm DSV) that is used throughout our 1.5T product line, including the Discovery<sup>\*</sup> MR450.

①

### Optical RF (OpTix)

OpTix Optical RF technology offers high channel count, analog to digital-optical signal conversion where it matters – inside the scan room to minimize noise and signal degradation, but away from the patient to enhance comfort and safety. OpTix provides up to 27 percent higher signal to-noise ratio (SNR) over our conventional, analog signal receivers, improving image quality and clinical confidence.

②



### Eco-technology

Ecomagination is our commitment to imagine and build innovative solutions to today's environmental challenges. With energy-conscious, ecomagination-certified technologies like efficient gradients with a peak amplitude of 33 mT/m and a slew rate of 120 T/m/s, as well as water-cooling, super capacitors and a 28 percent lower PDU rating, the Optima MR360 Advance requires 34 percent less energy than our previous generation MR systems.

(3)

**“**We've been able to bring premium technologies like Optix to the Optima MR360 Advance and make them standard on every system. What you get is a level of performance that is unmatched by other 1.5T platforms.**”**

– Optima MR360 Advance lead engineer



#### READY Interface

The READY Interface streamlines workflow by offering simplified control of the scan parameters, which may allow for greater consistency from technologist to technologist and ultimately patient to patient. The intuitive READY Bar control condenses 30 inputs into a single control. READY Brain software automatically determines slice thickness for brain scans resulting in more consistency and improved precision. The Express spine annotation feature simplifies spine exams by allowing semi-automatic annotation of vertebral bodies on sagittal T2w spine imaging, potentially resulting in faster exam times.

#### Express Suite

The Express Suite coil design achieves outstanding coverage and penetration depth. The Express posterior array is positioned directly beneath the cradle – minimizing the distance between the patient and the coil elements to maintain high SNR. This enables high-quality head, spine and body imaging. And the automatic coil selection helps enable quicker and more consistent exams.

# EXPRESS EXAMS.

## EXAM TIME WELL SPENT.

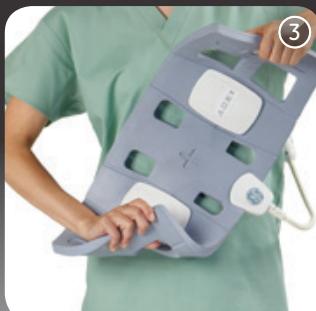
The time your technologists have with your patients is precious. Not only the amount of time, but the quality of time as well. Used efficiently, patients feel cared for and technologists can be more productive. We want your technologists to spend their time with your patients, instead of struggling with a cumbersome exam setup.

Our Express Suite coils were crafted to be intuitive and easy for technologists to use without sacrificing image quality. We also paired them with a new low-height table for easy patient access, even for larger patients. Together, they can help get your patients positioned quickly and comfortably, so your technologists can spend more of their time just being there.

“It’s easy to work quickly with a system, table and coils when they’re all designed to work together.”

– Express Suite lead coil engineer

- ① 16-channel head and neck array
- ② Nine-element anterior array
- ③ Four-channel Flex
- ④ Eight-channel foot and ankle
- ⑤ Eight-channel breast



# INTUITIVE APPLICATIONS.

## SEE TO UNDERSTAND.

Even with the right balance of design and technology, intuitive applications are what truly drive better understanding of what you need to see. The Optima MR360 Advance offers innovative applications to help you utilize the full potential of 1.5T MR imaging.

## NEEDLE-FREE SUITE.

How can you reduce the use of needles in certain exams? Our answer is the Needle-Free Suite of MR applications. Take advantage of what Needle-Free can offer with potential cost-savings for you and your facility, faster workflow for your technologists and a more comfortable imaging experience for your patients. For example, by avoiding contrast, you could do up to three additional procedures per day that could translate into over \$77,000 in additional revenue<sup>1</sup>.

- LESS BIOPSIES
- LESS CONTRAST
- LESS SEDATION

### PROPELLER 3.0

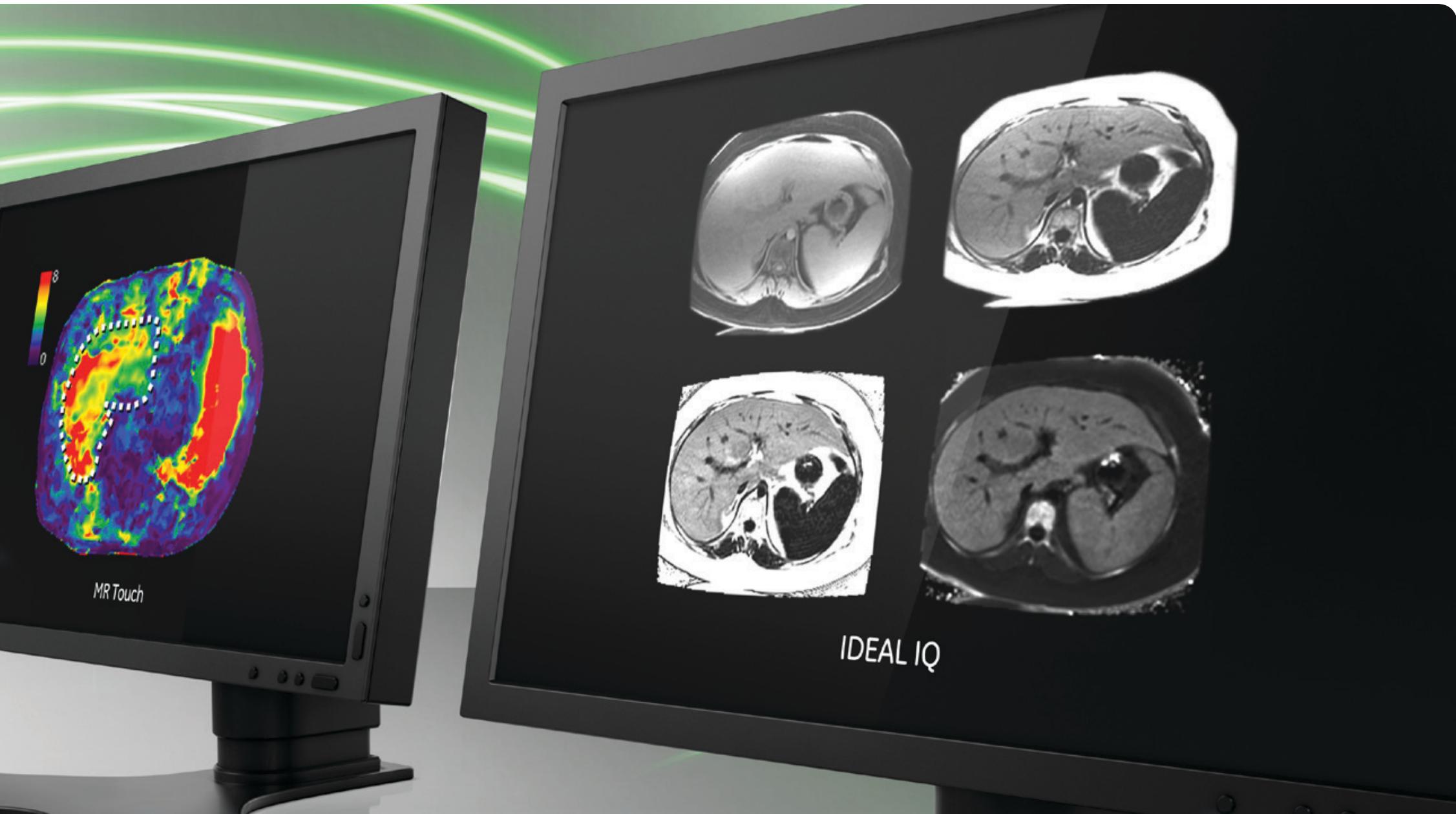
PROPELLER has low sensitivity to motion artifacts and high contrast-to-noise properties. This makes it well suited for producing high-resolution image quality even under challenging circumstances.

### MR Touch

MR Touch is a non-invasive method to measure relative tissue stiffness with MR. MR Touch combines hardware, acquisition and reconstruction algorithms to produce color-coded anatomical images, called elastograms, showing varying degrees of elasticity or stiffness.

### IDEAL IQ

IDEAL IQ is an exclusive technique that builds upon the original IDEAL (iterative decomposition of water and fat with echo asymmetry and least-squares estimation) technique. IDEAL IQ acquires multiple images of the anatomy at separate echo times to calculate the phase differences and determine triglyceride fat and water content per pixel.



#### LAVA Flex

LAVA Flex is a 3D FSPGR imaging technique that generates fat/water in-phase and out-of-phase echoes in a single acquisition.

#### 3D ASL (Arterial spin labeling)

3D ASL utilizes water in arterial blood as an endogenous contrast medium to help visualize tissue perfusion and provide quantitative assessment of cerebral blood flow.

#### Inhance Suite

The Inhance MRA Suite is a series of non-contrast enhanced techniques designed to image vasculature of the brain, abdomen and legs with excellent background suppression in short exam times.

#### 3D Heart

The whole heart volume is acquired in several slabs, using a multi-slab localizer that allows easy whole-heart imaging for coronary arteries.

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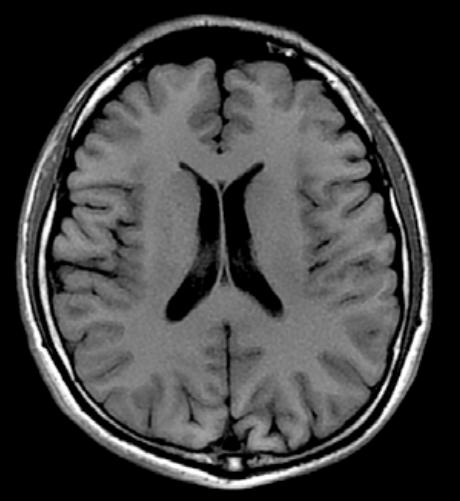
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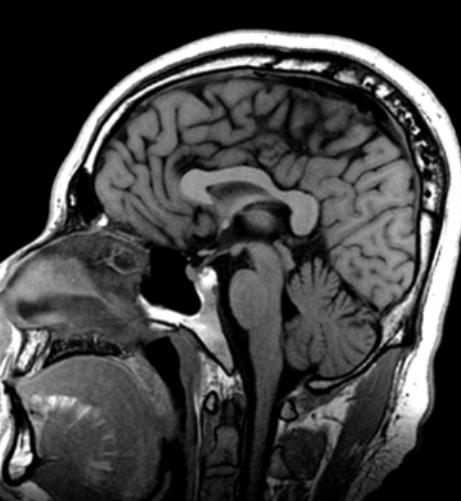
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## NEURO



Brain  
T1 FLAIR PROPELLER Axial  
288 x 288



Brain  
T1 Cube Sagittal  
288 x 288 1.2 mm

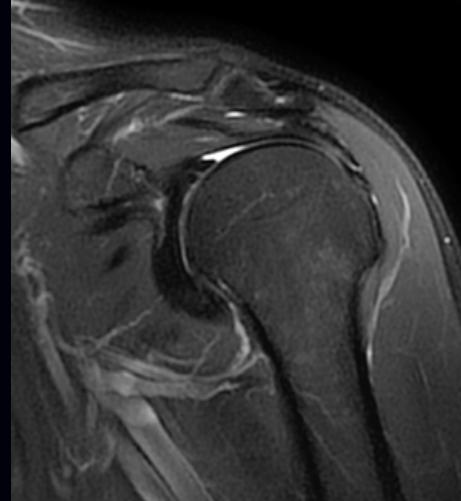


T-Spine  
T2 frFSE Sagittal  
416 x 288 3 mm



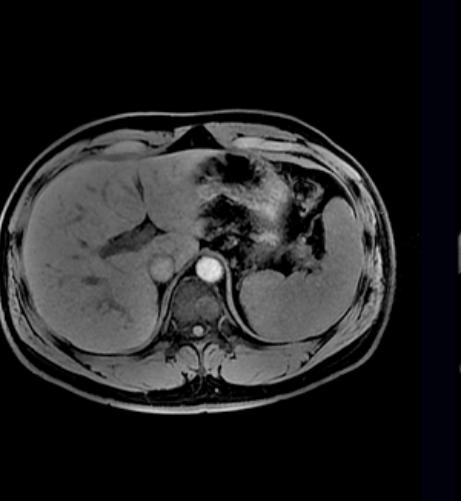
C-Spine  
T2 PROPELLER Sagittal  
320 x 320 3 mm

## MUSCULOSKELETAL

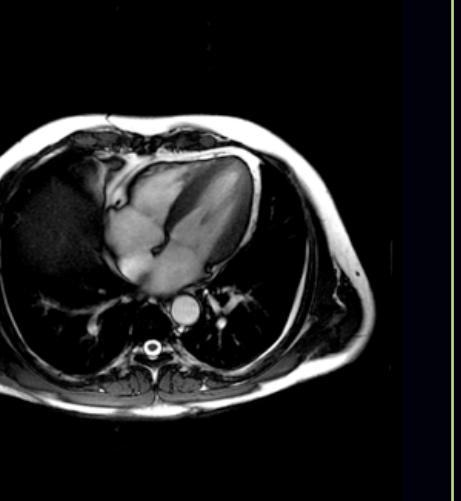


Shoulder  
PD PROPELLER Fat Sat Coronal  
256 x 256 4 mm

## BODY



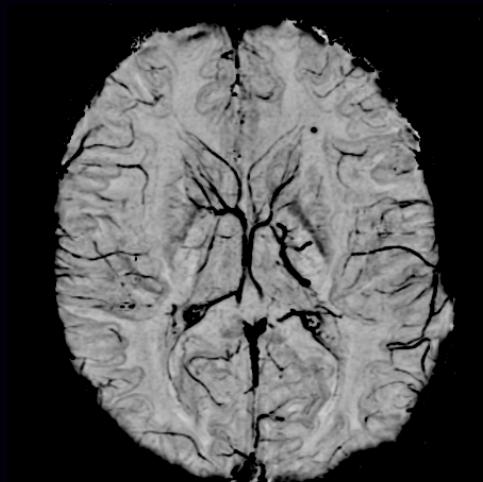
Abdomen  
LAVA Flex Axial  
320 x 224 4.22 mm



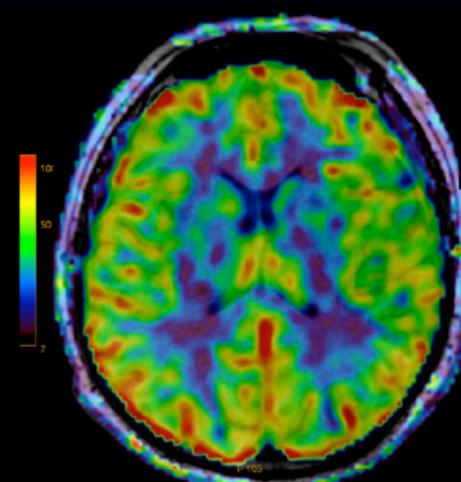
Cardiac  
FIESTA 4-chamber  
224 x 256



Inhance Deltaflow  
3 stations



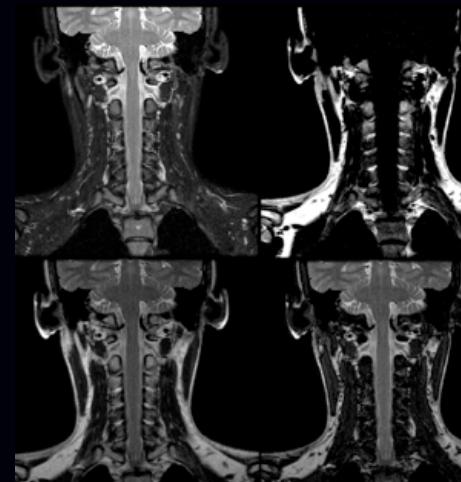
Brain  
SWAN  
384 x 320 1.8 mm



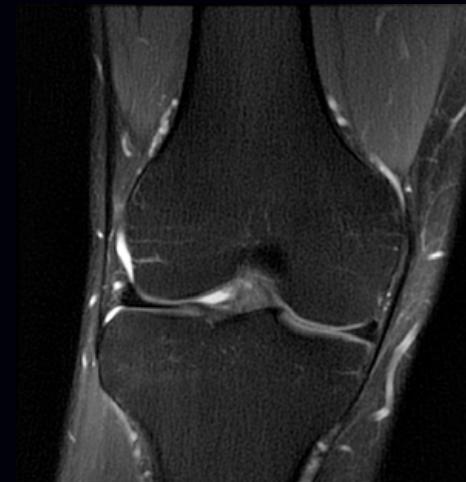
Brain  
3D ASL Axial  
Fusion to BRAVO



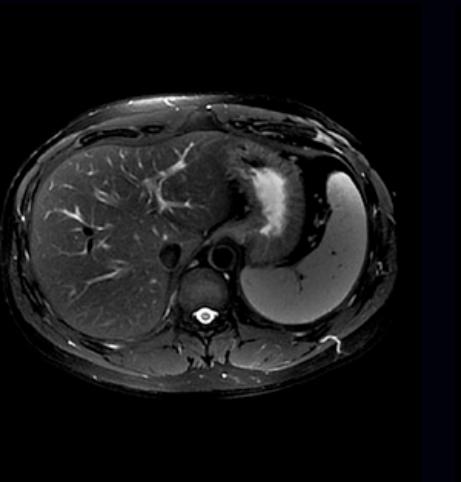
C-Spine  
T1 FLAIR PROPELLER Sagittal  
288 x 288



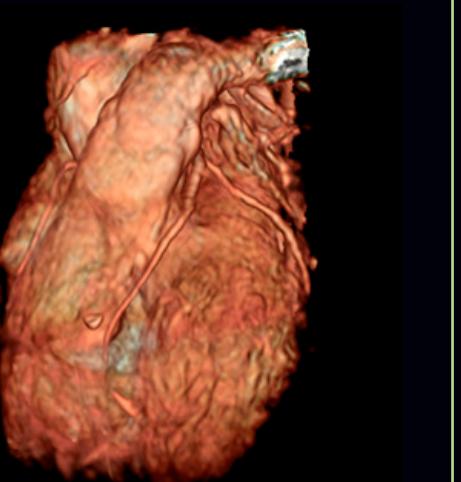
Brachial Plexus  
T2 IDEAL Coronal  
256 x 224 3 mm



Knee  
PD PROPELLER Fat Sat Coronal  
288 x 288 4 mm



Abdomen  
T2 PROPELLER Fat Sat Axial  
320 x 320 6mm



Cardiac  
3D Heart  
224 x 256 2 mm



# GO FURTHER.

## EXCEED YOUR EXPECTATIONS.

Being ready for the future means having a system that can not only grow beyond its original design, but surpass it. The Optima MR360 Advance was designed with the ability to go further and exceed your expectations.

Along with one of our many, customizable service plans, we have a 25-year history of providing you with select, no-charge service enhancements to keep your systems and application capabilities up to date, ensuring you get the most out of your investment. Safeguard the future performance of your Optima MR360 Advance with our latest digital services to help fix issues fast and even stop problems before they happen.

### InSite\*

InSite remote digital services enable us to reach out over broadband connections to understand and care for your critical equipment. Our advanced remote preventative maintenance features can help provide more timely and effective software updates to keep your equipment up and running. Over 90 percent of field replacement units could be isolated with high confidence and short troubleshooting time.

### InSite OnWatch

InSite OnWatch proactive technology can help avoid unplanned downtime by identifying service issues before they occur – even before you know anything is wrong.

### iLinq\*

iLinq allows you to request applications support and also receive a quick response from our technical experts, all at the touch of an on-screen button.



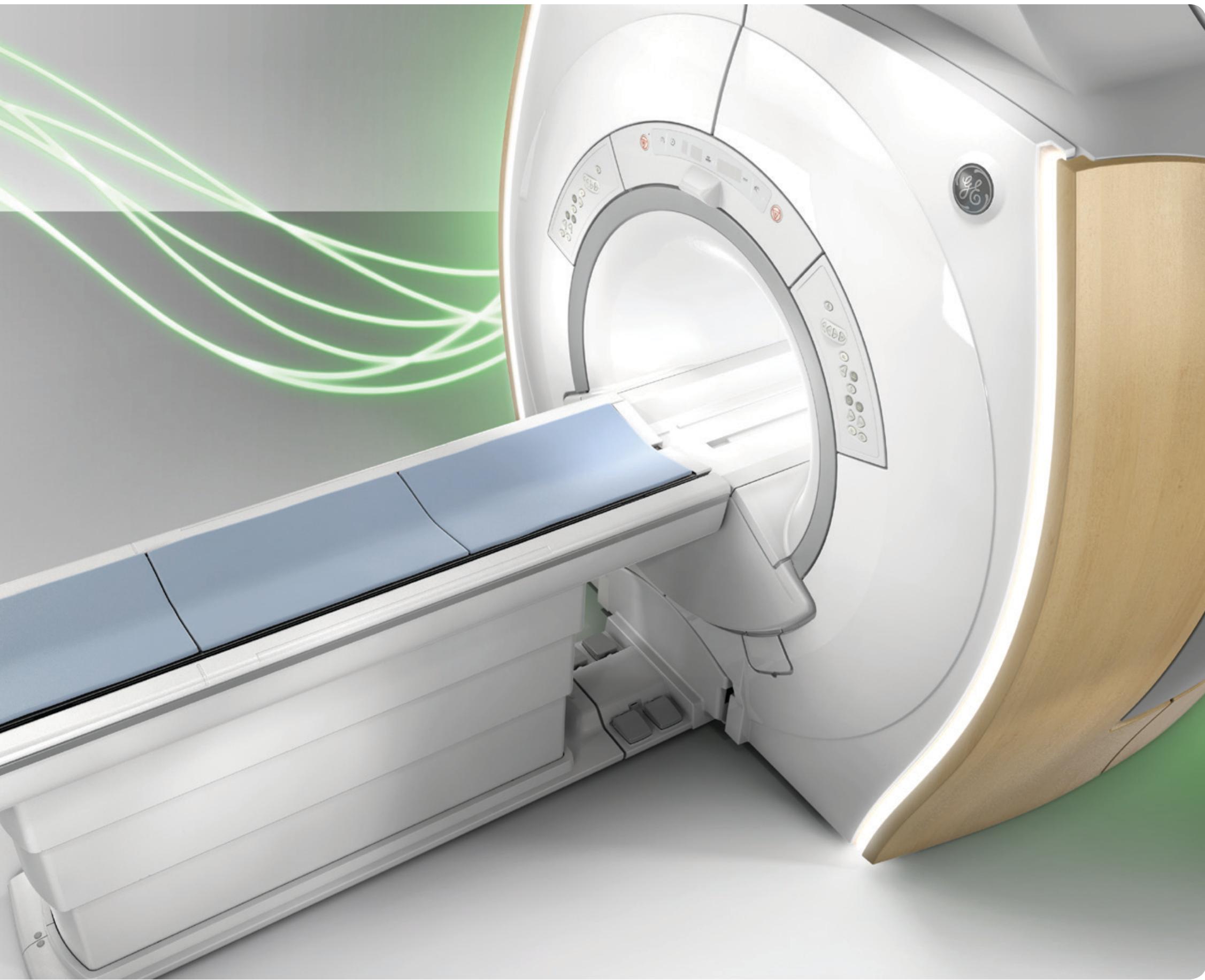


# **“I CAN’T WAIT TO SEE WHAT MR CAN REALLY DO.”**

This is what just one MR expert felt when they saw the Optima MR360 Advance for the first time. It exemplifies our goal to design an MR with as much emotion as technical prowess. This approach has led us to develop one of the most patient and user-friendly MR systems we've ever built.

## **WHAT WILL YOU FEEL WHEN YOU SEE IT FOR THE FIRST TIME?**





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<sup>1</sup> Non-Contrast Renal Magnetic Resonance Angiography with Inhance Inflow IR

Optima MR360 Advance is not yet approved by certain national regulatory authorities for commercial availability at this time. Currently, this brochure is intended for healthcare professionals outside the U.S.

## About GE Healthcare

GE Healthcare provides transformational medical technologies and services that are shaping a new age of patient care. Our broad expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug Optima, biopharmaceutical manufacturing technologies, performance improvement and performance solutions services help our customers to deliver better care to more people around the world at a lower cost. In addition, we partner with healthcare leaders, striving to leverage the global policy change necessary to implement a successful shift to sustainable healthcare systems.

Our "healthymagination" vision for the future invites the world to join us on our journey as we continuously develop innovations focused on reducing costs, increasing access and improving quality around the world. Headquartered in the United Kingdom, GE Healthcare is a unit of General Electric Company (NYSE: GE). Worldwide, GE Healthcare employees are committed to serving healthcare professionals and their patients in more than 100 countries. For more information about GE Healthcare, visit our website at [www.gehealthcare.com](http://www.gehealthcare.com)

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imagination at work

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