



SIGNA™ PREMIER *EVO* 3.0T

○ P E N U P

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# OPEN UP TO THE FUTURE OF IMAGING

MR technology is always advancing, and if your current system isn't meeting your growing needs, you might be thinking about a replacement. However, this has a major impact on your department, especially when you factor in unnecessary disruption and downtime.

Fortunately, you don't need to replace your 3.0T MR system to broaden its clinical capabilities. GE technology is incredibly easy to transform – you can keep your magnet and reconfigure around it.



Introducing SIGNA™ Premier *Evo*, a transformation that breathes new life into legacy 3.0T MR systems. Not only is this the world's first and only upgrade that opens up narrow-bore scanners from 60 cm to 70 cm for more comfortable scans, but it also opens up a vast array of clinical capabilities for your imaging department.

# OPEN UP POTENTIAL

A SIGNA™ Premier *Evo* transformation gives your legacy 3.0T MR system a makeover, equipping it for the future. With a wider bore and a larger field of view, you can make the scan experience more comfortable for patients and scan them more effectively.

An improved gradient performance and more Total Digital Imaging (TDI) RF Channels increase the quality of images, and a higher maximum weight limit means you can scan broader body types, extending your service to a wider patient population.



# LEGACY MR SYSTEM\* 60 CM



- 60 cm Narrow-Bore Magnet
- 48 x 48 x 48 cm Field of View
- 23/80 or 40/150 Twinspeed Gradient (Amplitude/Slewrate)
- 8, 16 or 32 RF Channels
- 350 lbs / 159 kg Max Patient Weight
- Detachable Table

# SIGNA™ PREMIER EVO 70 CM



## Same Magnet, Wider Bore

### Bilateral IRD's

Deep Learning in its DNA: **AIR™ Recon DL** standard, including future 3D† & PROPELLER Enhancements

AIR™ Coils: Head 48 Channels, Anterior Array 30 Channels, Multi-Purpose 21 or 20 channels

Field of View **50 x 50 x 50 cm**

Gradient up to **80 mT/m, 200 T/m/s**

**3 x 32 ch** Coil Ports in Table

Channels up to **146**

Max Patient Weight **550 lbs / 250 kg**

**eXpress™** Detachable Table with **60 Channel AIR™ Posterior Array**

**Toe-to-Head** Whole-Body Imaging & **Feet-First Scanning**

\* Image is representative. Most of the GE 3.0T 60 cm systems are eligible for transformation. Contact your GE representative for additional details.

† AIR™ Recon DL 3D and AIR™ Recon DL PROPELLER are 510(k) pending at FDA. Not yet CE marked. Not available for sale in the United States or the EU.

Not commercially available in all markets.



# THE WIDER VIEW

## FOR PATIENTS

Patients will benefit from shorter scan times and the added comfort delivered from a wider 70 cm bore and AIR™ Technology.

## FOR STAFF

Your staff will be able to help more patients with our most accessible system yet. Cut down on the need for rescans by reducing claustrophobia rejection rates by 90%\* and the need for sedation.<sup>1</sup>

## FOR RADIOLOGISTS

Radiologists will achieve pin-sharp image precision, undeniable speed, and consistent results.

## FOR THE ENVIRONMENT

As well as extending the lifespan of your initial investment, SIGNA™ Premier Evo is a sustainable option that reduces helium usage and eliminates magnet waste.

\* Claustrophobia rate comparison head-first/feet-first.

1. Enders J, Zimmermann E, Rief M, et al. Reduction of claustrophobia during magnetic resonance imaging: methods and design of the "CLAUSTRO" randomized controlled trial. *BMC Med Imaging*. 2011 Feb 10;11:4. doi: 10.1186/1471-2342-11-4. PMID: 21310075; PMCID: PMC3045881.

# ENHANCE THE PATIENT EXPERIENCE

Your imaging department needs to accommodate different types of patients by improving comfort and accessibility. Fortunately, the SIGNA™ Premier *Evo* transformation helps you remain receptive to their needs, without sacrificing the quality of results.



SIGNA™ Premier Evo is the first and only 60 cm to 70 cm upgrade that expands the bore of legacy 3.0T MR systems. This 36% larger cross-section and the addition of feet-first imaging will greatly enhance patient satisfaction, reduce claustrophobia rejection rates by up to 90%\* and the need for sedation.<sup>1</sup> Our wider eXpress™ Detachable Table lets you prepare patients outside the imaging room and accommodates a 1.6x greater maximum weight limit (550 lbs / 250 kg) than your legacy MR system, meaning you can expand your service to a wider patient population.

Lightweight, blanket-like AIR™ Coils are 50% lighter than conventional coil technology, providing added comfort and more accurate results. Patients no longer need to be readjusted during their scans as whole-body imaging workflows allow different organs to be scanned simultaneously, helping procedures to run seamlessly and smoothly. AIR™ Recon DL also reduces scan time by up to 50%, which helps lower patients' stress levels.

LARGER BORE  
gives patients 36% more room,  
making scans more comfortable

AIR™ COILS  
are 50% lighter than  
conventional coil technology

AIR™ RECON DL  
reduces scan time by up to 50%

“INSTANTLY  
THAT'S SAVING  
THREE OR FOUR  
MINUTES...  
WITHOUT LOSING  
IMAGE QUALITY.”

*Prof. Martin Graves, University of Cambridge, UK.  
Regarding scan time improvement and patient comfort with AIR™ Recon DL*

\* Claustrophobia rate comparison head-first/feet-first.

1. Enders J, Zimmermann E, Rief M, et al. Reduction of claustrophobia during magnetic resonance imaging: methods and design of the "CLAUSTRO" randomized controlled trial. *BMC Med Imaging*. 2011 Feb 10;11:4. doi: 10.1186/1471-2342-11-4. PMID: 21310075; PMCID: PMC3045881.





# EXPAND CLINICAL CAPABILITIES

To provide the best clinical service for your patients, it's important to have access to the latest technologies so you can enhance your performance and improve results. A SIGNA™ Premier *Evo* transformation revolutionizes your legacy MR system, making it fit for your future research and advanced clinical endeavors.



With access to the latest advanced AI technologies, users can scan all anatomies and achieve pin-sharp, consistent images faster, broadening your scanning capabilities and ensuring your patients get the most accurate results.

Our pioneering Deep Learning-based reconstruction algorithm, AIR™ Recon DL, has been proven to improve signal-to-noise ratio (SNR). This in turn accelerates scan time by up to 50%, meaning you can see more patients daily and work faster.

To further enhance your image quality and scan uniformity, SIGNA™ Premier *Evo* comes with a higher gradient performance of up to 80 mT/m (peak amplitude) and 200 T/m/s (slew rate), and 146 Total Digital Imaging (TDI) RF Channels. You'll also notice the difference automated applications such as AIR Touch™ and AIR x™ make to both your workflow and patient throughput.

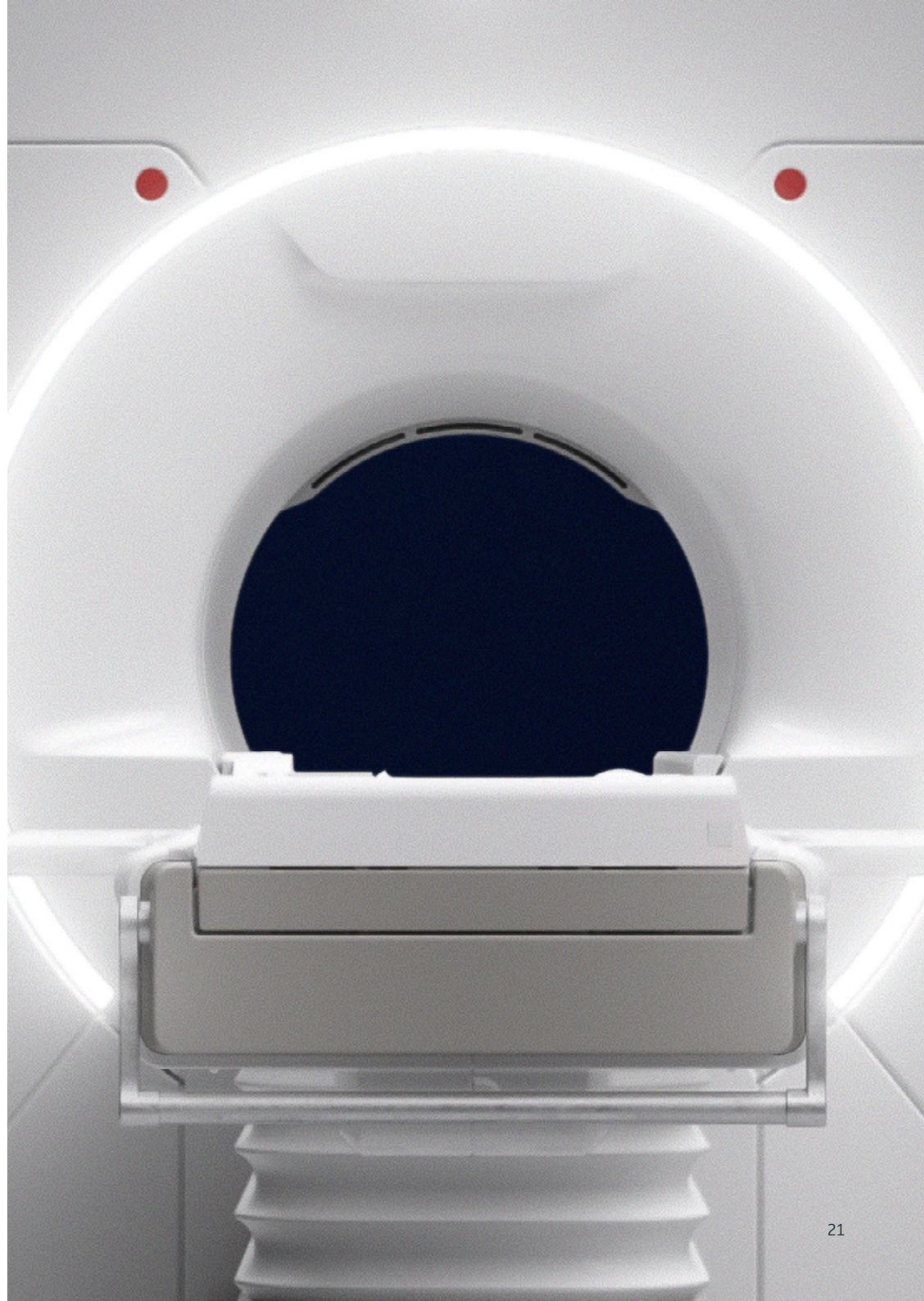
**IMPROVE** —————  
confidence from referring physicians with an MR system that enhances your clinical service

**ACCESS** —————  
the latest advanced AI technologies to speed up scan time and improve accuracy

**ENHANCE** —————  
image quality and uniformity with a higher gradient and more Total Digital Imaging (TDI) RF Channels than legacy MR systems

# EXTEND INVESTMENTS

Replacing your legacy MR system is a significant expense, especially when you factor in the cost of installation, unnecessary downtime, and disruption to your daily practice. SIGNA™ Premier *Evo* avoids all these challenges, making upgrading a more cost-effective and less disruptive investment.



Upgrading to SIGNA™ Premier *Evo* means you can break even up to 40% faster than if you were to replace your legacy MR system.\* The faster imaging and post-processing capabilities afforded by the AIR™ family of technologies can help reduce your time slots by up to 50%, increasing the annual volume of procedures by up to 26%. This improved productivity helps you to get more out of your system.

All this without replacing your advanced GE magnet, which doesn't wear out, giving you greater value from your initial investment.

**UPGRADING** —————  
around your existing magnet  
is more cost-effective than  
replacing your MR system

**BREAK EVEN** —————  
up to 40% faster than if  
you were to replace your  
legacy MR system\*

**PROFIT** —————  
increase the annual volume  
of procedures by up to 26%

For added assurance, we're providing legacy MR systems with new covers, electronics, and software updates to improve future capabilities, as well as system life.

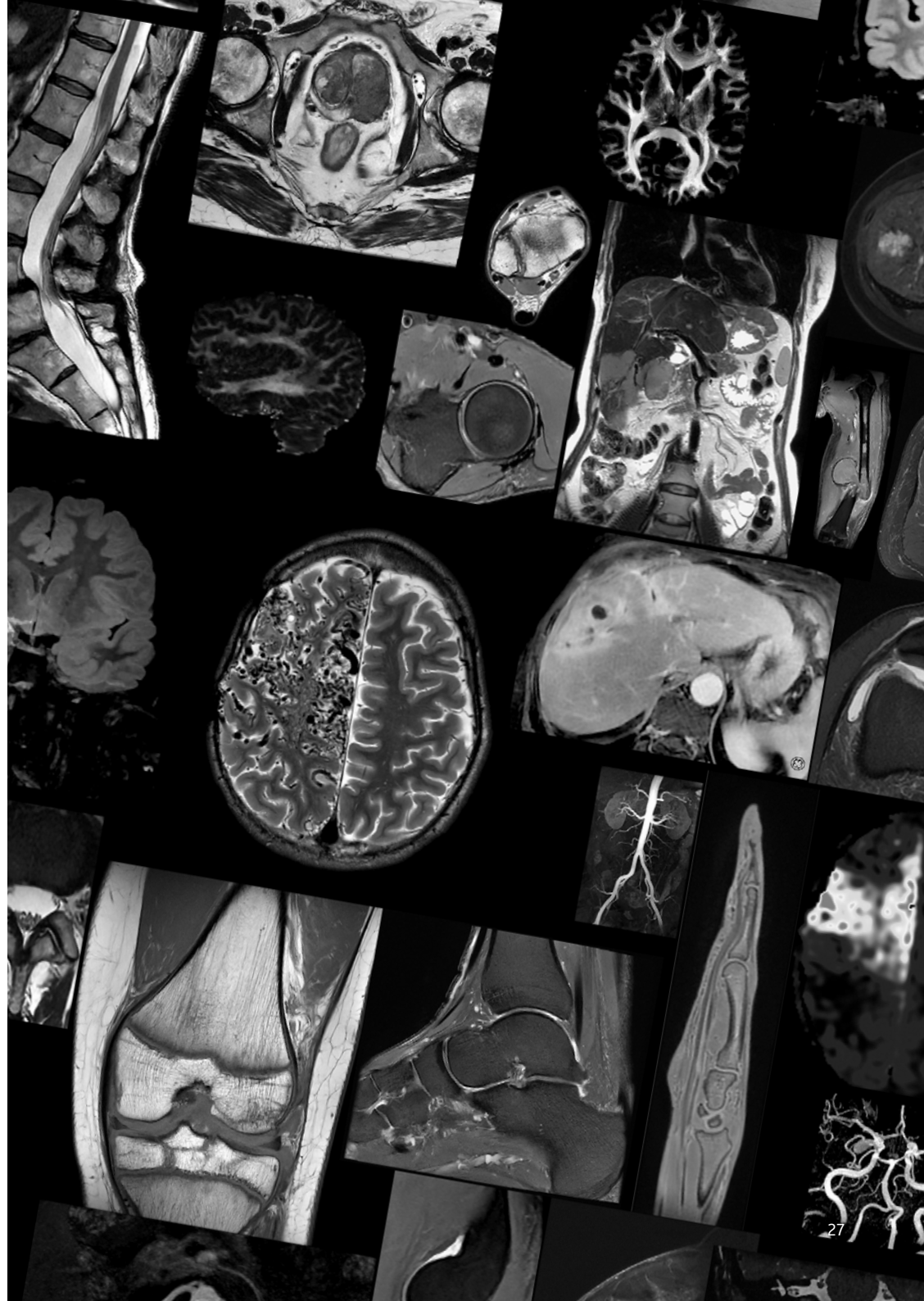
A dark, atmospheric landscape with a glowing ring in the sky. The scene is dominated by deep blues and blacks, with a bright, glowing ring or halo in the upper right quadrant, set against a dark, hazy background. The foreground shows a dark, textured surface, possibly a field or a forest floor, with some faint, glowing lines that suggest a path or a network of light. The overall mood is mysterious and futuristic.

“MR SYSTEMS ARE...  
EXPENSIVE AND  
THERE'S CONSTANT  
CHANGES IN THE  
TECHNOLOGY.  
SO, I THINK THIS  
IS AN IMPORTANT  
INVESTMENT.”

*Dr. Andres Von Heijne, Danderyds Hospital, Sweden  
Regarding AIR™ Recon DL*

# ALL-ROUND BETTER IMAGING

For pin-sharp precision, you need a SIGNA™ Premier *Evo* transformation. With AIR™ Recon DL, radiologists can achieve sharper, more consistent images like these, making diagnoses simpler and more accurate.



AIR™ Recon DL imaging for Speed | Total Exam Time 248 seconds



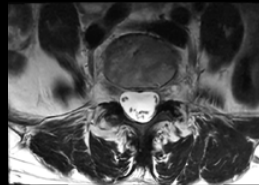
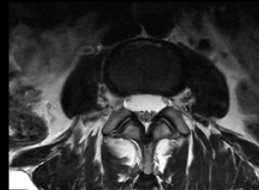
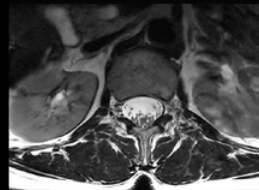
Sag T2 FSE  
0.6 x 0.9 x 3.5 mm | 50 sec



Sag T1 FSE  
0.8 x 1 x 3.5 mm | 1:08 min



Sag T2 STIR  
0.7 x 1 x 3.5 | 1:38 min

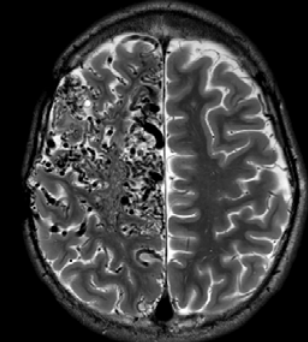


Ax T2 FSE  
0.7 x 0.9 x 4 mm | 40 sec

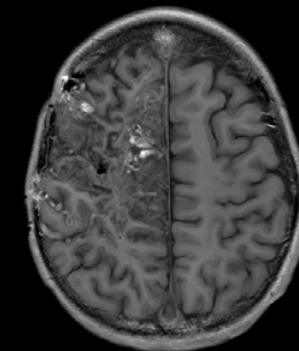
Proliferative Angiopathy



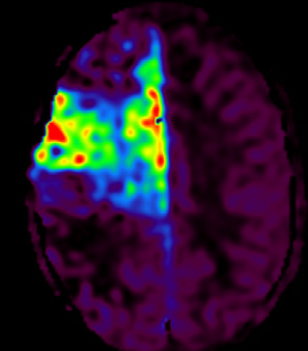
Sag T2 FSE  
0.4 x 0.5 x 3 mm | 2:08 min



Ax T2 FSE  
0.4 x 0.4 x 3 mm | 2:14 min



Ax T1 SE Gado  
0.6 x 0.7 x 5 mm | 0:40 min

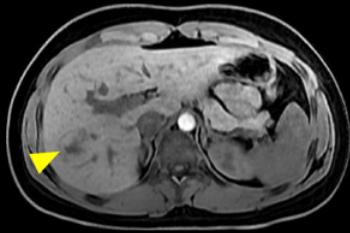


3D ASL  
Matrix: 512 x 8 | 4:05 min

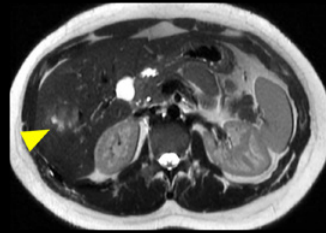
# BODYWORKS

## Liver Imaging with the large AIR™ MP Coil - FNH

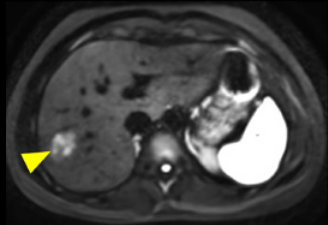
Early enhancement on arterial phases  
Hepatobiliary phase shows central scar, typical of FNH



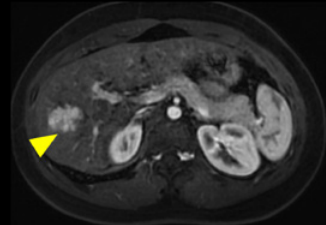
LAVA Flex free breathing  
HyperSense with Nav  
1.3 x 1.5 x 1.3 mm | 52 sec



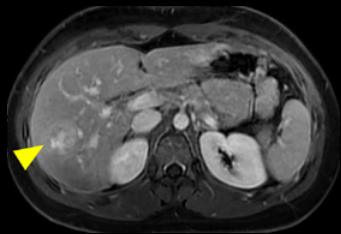
Ax T2 SSFSE 2xBH  
1.2 x 1.4 x 3 mm | 40 sec



Ax DWI FS b800 RTr  
3.3 x 1.7 x 5 mm | 2:26 min



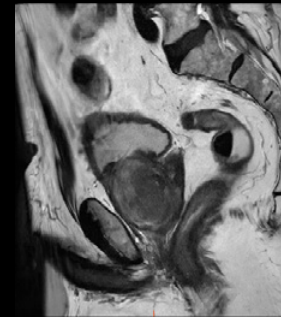
LAVA HyperSense  
Dynamic phase 2 min  
1.5 x 1.5 x 1.3 mm | 10 sec



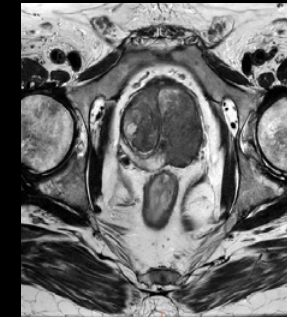
LAVA HyperSense  
Late phase 5 min  
1.3 x 1.5 x 1.3 mm | 19 sec



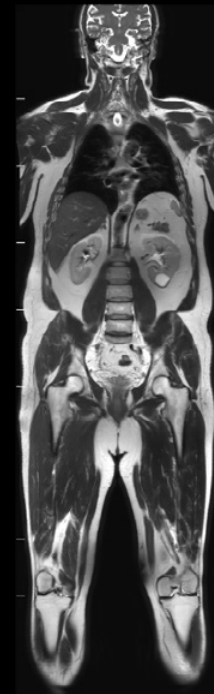
LAVA HyperSense  
Hepatobiliary phase  
1.3 x 1.7 x 1.3 mm | 17 sec



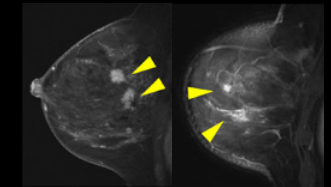
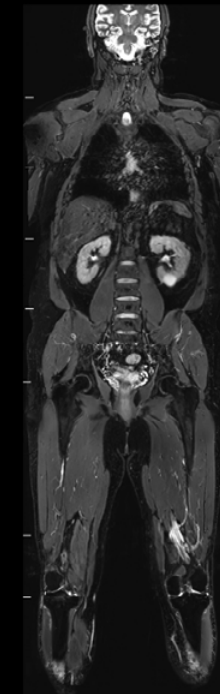
Sag T2 FSE Fast  
0.4 x 0.6 x 3 mm | 1:17 min



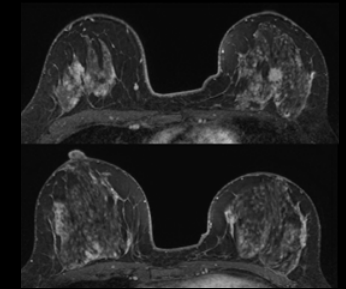
Ax T2 FSE  
0.5 x 0.6 x 2.5 mm | 2:42 min



Cor T2 SnapShot | # of station: 5 | Matrix: 440 x 300  
# of Slices: 42 | 42 sec/each



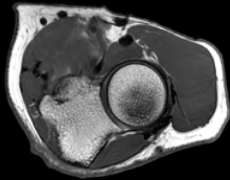
Sag VIBRANT ASPIR  
with HyperSense  
0.65 x 0.65 x 2.8 mm  
1 min/phase 5 phases



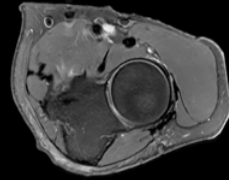
Ax VIBRANT ASPIR with  
HyperSense  
0.68 x 0.68 x 1 mm | 2 min



## AIR™ Recon DL – Fast Elbow in 5 minutes!



Ax PD FSE  
0.2 x 0.4 x 3.0 mm  
44 sec / 28 Slices



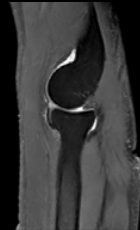
Ax PD FatSat  
0.3 x 0.5 x 3.0 mm  
1:18 min / 28 Slices



Cor PD FSE  
0.2 x 0.4 x 2.5 mm  
49 sec / 19 Slices



Cor PD FatSat  
0.3 x 0.6 x 2.5 mm  
1:29 min / 19 Slices



Sag PD FatSat  
0.3 x 0.6 x 3.0 mm  
43 sec / 22 Slices

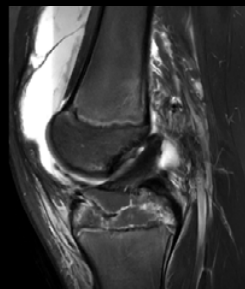
## Knee imaging – Tibial plateau Fracture



Cor STIR  
Matrix: 320 x 260  
0.5 x 0.7 x 3 mm |  
3:20 min

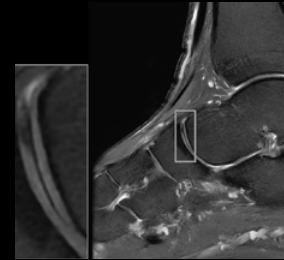


Cor T1  
Matrix: 512 x 420  
0.3 x 0.4 x 3 mm |  
2:09 min



Sag T2 FS  
Matrix: 420 x 320  
0.4 x 0.5 x 3 mm |  
2:13 min

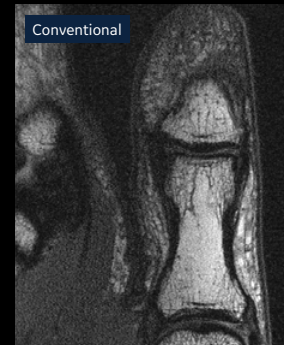
## High Resolution Imaging with AIR™ Recon DL



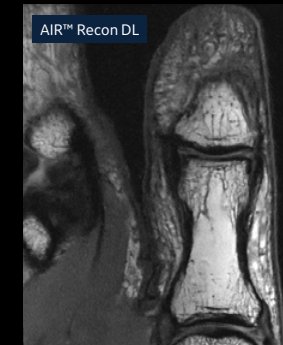
Sag PD FatSat  
with AIR™ Recon DL  
3:42 min | 0.3 x 0.3 x 2.5 mm



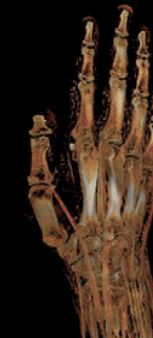
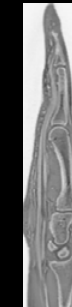
Sag T1 FSE  
with AIR™ Recon DL  
2:45 min | 0.2 x 0.3 x 3 mm



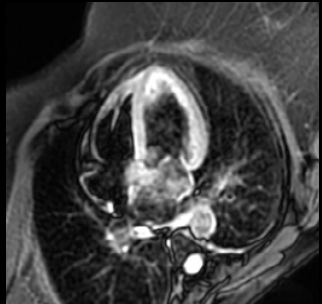
Conventional  
Cor PD FSE | 136 μm x 182 μm x 1.2 mm 3:16 min / 18 Slices



## oZTEo Bone Imaging



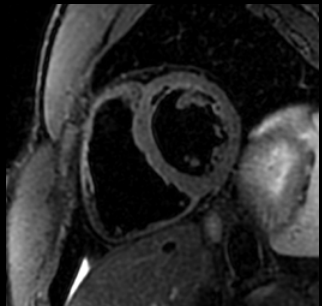
Cardiac imaging with Multi-Purpose 21ch AIR™ Coil



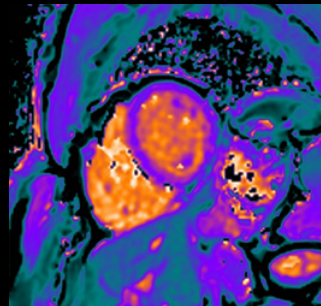
Conventional Long Axis Triple IR  
1.8 x 1.8 x 10 mm | 1:02 min



AIR™ Recon DL Long Axis Triple IR  
1.8 x 1.8 x 10 mm | 34 sec

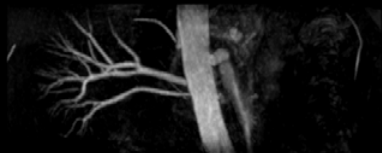


Short Axis T2 Black Blood  
Double IR FatSat



MOLLI T1 Map

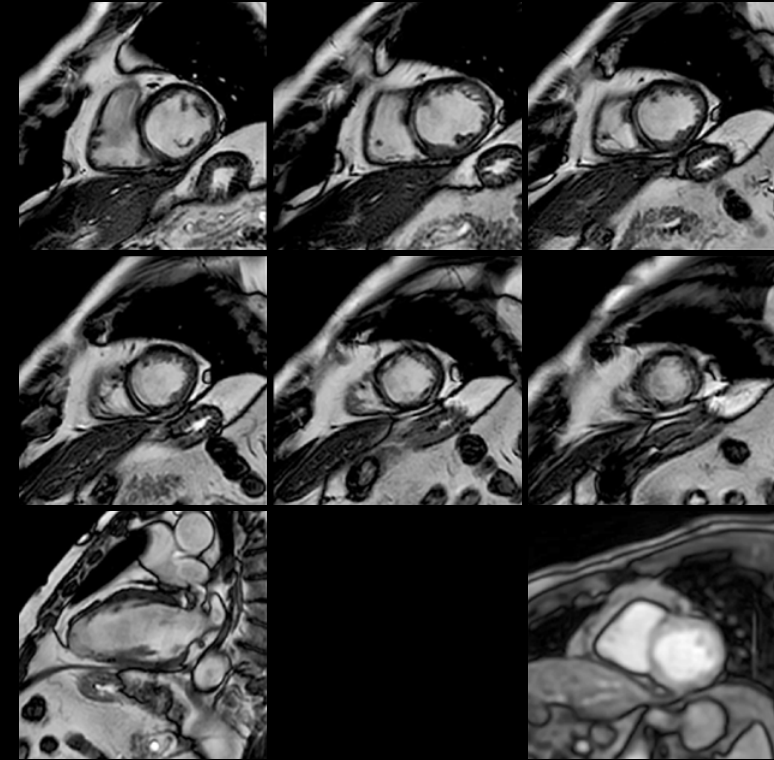
Renal Arteries



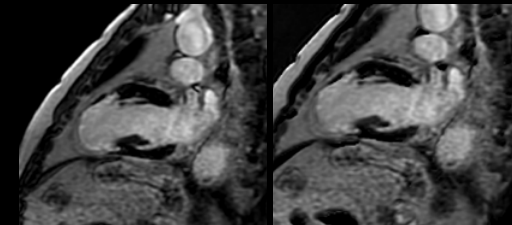
Enhance IFIR Axial (non contrast) | 0.8 x 1.3 x 0.8 mm | 4:28 min



Apical Myocardial Infarction



Cine FIESTA  
1.8 x 1.8 x 8 mm



Phase Sensitive MDE  
1.9 x 2.8 x 8 mm | 48 sec



SHINING A LIGHT  
ON SUSTAINABILITY

SIGNA™ Premier Evo widens the scope for a more sustainable future by allowing you to transform, rather than replace, your legacy MR magnet.

As there is no need to build or transport a new magnet, keeping your current magnet reduces unnecessary fossil fuel emissions. You can also save up to 2,000 L of helium by transforming your legacy MR system instead of replacing it, lowering your carbon footprint. AIR™ Recon DL also reduces power consumption per patient scan by up to 50%, which is more affordable for you and kinder for the environment.

“AIR™ RECON DL  
IS REALLY A  
GAME-CHANGER”

*Dr. Hollis Potter, Hospital for Special Surgery, USA*

## ENHANCE PATIENT COMFORT

A 70 cm bore and lightweight, blanket-like AIR™ Coils help improve patient comfort and accessibility

## EXPAND CLINICAL CAPABILITIES

Achieve pin-sharp image quality, undeniable speed, and consistency with our pioneering Deep Learning-based reconstruction algorithm, AIR™ Recon DL

## EXTEND INVESTMENTS

Gain a 40% faster ROI vs. a replacement with a SIGNA™ Premier Evo transformation\* and reduce your carbon footprint by keeping your current advanced GE MR magnet



## Open up with a SIGNA™ Premier *Evo* transformation

If you're interested in learning more, please contact a representative for a product demonstration.

### **About GE Healthcare.**

GE Healthcare is the \$18 billion healthcare business of GE.

(NYSE: GE). As a leading global medical technology and digital solutions innovator, GE Healthcare enables clinicians to make faster, more informed decisions through intelligent devices, data analytics, applications, and services, supported by its Edison intelligence platform. With over 100 years of healthcare industry experience and around 50,000 employees globally, the company operates at the center of an ecosystem working toward precision health, digitizing healthcare, helping drive productivity, and improving outcomes... for patients, providers, health systems, and researchers around the world.

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JB20355XX May 2022