GE HealthCare unveils next-generation SIGNA MRI technology, aiming to boost efficiency, enhance patient experience, and advance sustainability

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- SIGNA Bolt[1], a new 3T MRI scanner, is designed with a next-gen gradient system engineered to support precision diagnostics, clinical efficiency, and advanced research capability.
- SIGNA Sprint with Freelium,[2] a new sealed magnet MRI system, seeks to reimagine 1.5T MRI by combining a sustainable design with remarkable image quality, and operational autonomy to expand access to MR.
- Both new systems, 510(k) pending at the U.S. FDA, are powered by SIGNA One[3], an ecosystem of AI-driven workflow solutions designed to reduce inefficiencies and support MRI exams from plan to scan and beyond.

CHICAGO--(BUSINESS WIRE)--Nov. 30, 2025-- GE HealthCare (Nasdaq: GEHC) today announced the 510(k) submissions to the U.S. Food and Drug Administration (FDA) seeking clearance for next-generation SIGNA™ MRI technology. Unveiled at the Radiological Society of North America's 2025 Annual Meeting, these differentiated solutions are part of a wave of new GE HealthCare innovations aimed at tackling some of the most complex challenges in healthcare. Designed to enhance precision diagnosis for clinicians and help clinicians improve patient outcomes, the new technologies include GE HealthCare's [4] 1.5T MRI system, both equipped with an AI-powered workflow platform designed for end-to-end exam efficiency.

With imaging needs outpacing the radiologist workforce[5], leading to longer wait times, burnout and delays in diagnosis, many departments are struggling to keep pace. At the same time, aging equipment and flat reimbursement rates are pushing providers to seek smarter, more sustainable solutions.

"The urgency for greater access, efficiency and precision in MRI has never been greater. We've listened to clinicians who are seeking smarter, more sustainable technologies to meet today's challenges and tomorrow's needs," said Kelly Londy, President & CEO, MR, GE HealthCare. "With the introduction of our advanced SIGNA lineup, we're delivering on a bold vision for MRI — one that intentionally puts smarter technology to work for clinicians and patients alike to make MRI more intuitive, more efficient, and more impactful in everyday care."

SIGNA™ Bolt: Aiming to translate innovative discoveries and complex exams into everyday patient care

SIGNA Bolt[6] aims to bring to market our most advanced high-field, clinical wide bore 3.0T MRI system and is seeking to combine ultra-high gradient performance, intelligent digital radio frequency (RF) architecture, and sustainable design to deliver precision imaging, fast workflows, and seamless clinical-to-research flexibility, all with exceptionally low energy consumption and operational costs.

SIGNA Bolt is designed to include:

- The power needed to deliver diagnostic quality in everyday scans with outstanding gradient and RF performance for both research and clinical applications
- Next-gen AI-enabled workflow of SIGNA One in combination with deep learning applications that are designed to enable accelerated examination times
- Deep-learning based advanced applications that aim to enhance diagnostic capabilities
- End-to-end clinical pathway solutions from planning to reporting for neurology and oncology
- Advanced developer toolkits to simplify research

SIGNA™ Sprint with Freelium™: Designed to be purposefully helium-free without compromising on clinical or operational efficiency

SIGNA Sprint with Freelium[7] aims to broaden access to sustainable and equitable MRI technology. With less than 1% helium usage[8], Freelium is designed to provide effortless sustainability without compromising clinical and operational efficiency.

Engineered for excellence, the SIGNA Sprint with Freelium 1.5T system is designed to support remarkable image quality through exceptional homogeneity, high signal-to-noise ratio (SNR) and image clarity. Integrated with deep learning solutions, including AIR™ Recon DL and Sonic DL with wide coverage of anatomies and clinical applications, the system aims to provide consistent clarity and diagnostic confidence.

Designed with flexibility in mind, its Freelium ventless magnet is designed to allow installation virtually anywhere – from inside hospitals to remote regions, expanding access to advanced MR capabilities for more patients and communities. SIGNA Sprint with Freelium features two levels of operational autonomy to empower radiology departments: Scanning Autonomy with SIGNA One Interface, an intuitive user interface aiming to simplify scanning for all levels of technologist experience, and Autoramp with intelligent sensors designed to support automated magnet recovery and supporting system uptime without the need for a field engineer.

SIGNA ™Sprint with Freelium is designed to include:

- A design that uses less than 1% helium versus conventional designs[9] with no additional power or cooling required
- MR magnet installation virtually anywhere – from inside hospitals to remote regions that need more access to advanced MR capabilities, due to its ventless design

- Exceptional homogeneity[10] designed for impressive image quality and diagnostic capability

SIGNA One[11]: Aiming to reduce inefficiencies with a new, AI-powered MRI workflow platform

A next-gen, AI-powered workflow platform that is designed to improve the imaging experience by combining precision with simplicity, SIGNA One offers five innovations at its core designed to streamline operations and elevate clinical confidence.

"We're dedicated to making every interaction smooth, fast and patient centric by using predictive technology that boosts efficiency," said Bryan Mock, PhD, General Manager, Global Product Segment, Premium MR, GE HealthCare. "SIGNA One technology is designed to simplify and improve the efficiency of experienced users, while aiming to shorten the learning curve for new users. Regardless of a users' experience level, SIGNA One aims to liberate users from inefficiencies at every stage of the MR imaging process."

SIGNA ™One is designed to include[12]:

- An intuitive user experience that may help reduce training time and aims to boost productivity while aiming to shorten the learning curve for new and less experienced users
- The SIGNA One Table, designed to enhance patient comfort and simplify patient transport
- Fully automated SIGNA One Camera with In-Room Console live feed, AI-enabled landmark localization and patient positioning verification, with real-time visual guidance on a touchscreen display — aiming to improve speed and accuracy of patient setup
- Contactless respiratory and peripheral gating designed to capture physiological data effortlessly, regardless of patient orientation and without the need for external devices
- High-resolution, In-Room Consoles empowering technologists with simple patient setup control, aiming to minimize interruptions and maximizing throughput

GE HealthCare is integrating with NVIDIA technology to enhance the performance and intelligence of its MR products by utilizing NVIDIA GPUs to accelerate the development of deep learning reconstruction models. Accelerated by NVIDIA's RTX product line and programmed with the new SIGNA One MRI Workflow solutions and advanced deep learning tools that are designed to elevate the user and patient experience, SIGNA Bolt and SIGNA Sprint with Freelium are designed to provide powerful imaging techniques for tailored patient care.

Learn more about these and other GE HealthCare MRI technologies at GE HealthCare's booth #7334 at RSNA's annual meeting in Chicago through Dec. 4.

About GE HealthCare Technologies Inc.

GE HealthCare is a trusted partner and leading global healthcare solutions provider, innovating medical technology, pharmaceutical diagnostics, and integrated, cloud-first AI-enabled solutions, services and data analytics. We aim to make hospitals and health systems more efficient, clinicians more effective, therapies more precise, and patients healthier and happier. Serving patients and providers for more than 125 years, GE HealthCare is advancing personalized, connected and compassionate care, while simplifying the patient's journey across care pathways. Together, our Imaging, Advanced Visualization Solutions, Patient Care Solutions and Pharmaceutical Diagnostics businesses help improve patient care from screening and diagnosis to therapy and monitoring. We are a $19.7 billion business with approximately 53,000 colleagues working to create a world where healthcare has no limits.

GE HealthCare is proud to be among 2025 Fortune World's Most Admired Companies™.

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[1] SIGNA Bolt is 510(k) pending at U.S. FDA. Not CE marked. Not available for sale.

[2] SIGNA Sprint with Freelium is a configuration of SIGNA Sprint Select. SIGNA Sprint Select is 510(k) pending at U.S. FDA. Not CE marked. Not available for sale.

[3] SIGNA One is 510(k) pending with the U.S. FDA. Not CE marked. Not available for sale.

[4] Helium-free: Helium is permanently enclosed in the magnet.

[5] Harvey L. Neiman Health Policy Institute, 2025.

[6] SIGNA Bolt is 510(k) pending at U.S. FDA. Not CE marked, not available for sale.

[7] SIGNA Sprint with Freelium is a sealed configuration of SIGNA Sprint Select, 510(k) pending at the U.S. FDA. Not CE marked, not available for sale.

[8] Compared to conventional magnets.

[9] Helium-free: Helium is permanently enclosed in the magnet

[10] as conventional IPM magnet.

[11] SIGNA One represents features of SIGNA Bolt and SIGNA Sprint Select which are 510(k) pending at U.S. FDA. Not yet CE marked. Not available for sale.

[12] All features may not be included in all system configurations.

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