



Revolution ACTs

Your Aspirations. Realized.

The new, affordable and easy to operate CT, that delivers excellent clinical image quality





Revolution.

Your Aspirations. Realized.

Healthcare professionals in Africa face unique challenges when it comes to the optimization of space, resources and technology that delivers quality imaging and accurate diagnostics for patients, across a spectrum of clinical disciplines.

Simple and fast, CT is one of the most valuable diagnostic imaging tools in healthcare. GEHC's new Revolution ACTs series is tailored to meet your unique needs while delivering:

- New CT Technology at low Total Cost of Ownership (TCO)
- Excellent Clinical Outcomes for your Daily Scans
- Simpler User Interface
- Quality patient experience with lower dose of up to 40% *
- Financial performance with outstanding return on investment and quick break-even.
- Easy installation, service & maintenance
- Educational support
- Remote support **

Now comes Revolution ACTs.

*Optional with ASIR (Option available on Revolution ACTs EX only)

**Optional

More of what you want. Exactly what you need.

Healthcare today offers new opportunities for growth, and the quality of CT services can make all the difference in what you're able to achieve.

A Revolutionary concept

Revolution™ ACTs is designed not only as a product, but as a solution to help you provide better patient care — and provide it to more patients. It's the centerpiece of our commitment to help you achieve your CT services aims.

You'll find many of the technologies inherited from our most advanced Revolution CT system – like the new Clarity panel detector, new user interface, or ViSR dose reduction technology.

Helping you feel more confident about moving to the next level, clinically and economically — that's intelligent innovation.

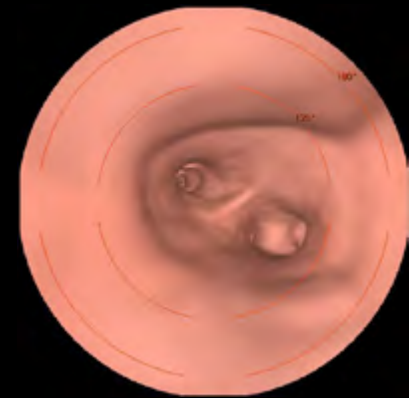
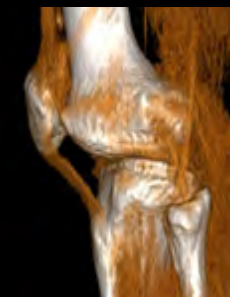
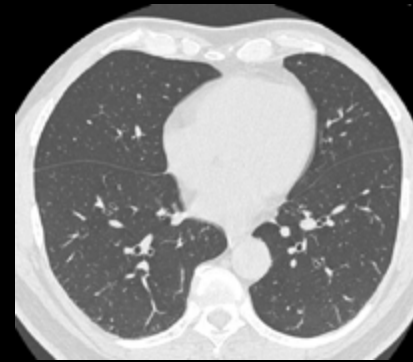
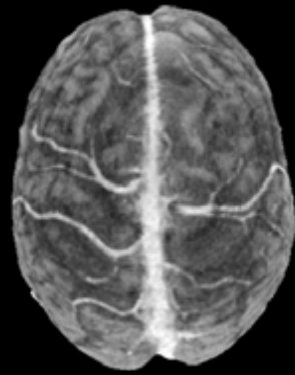
We're with you all the way

Offer the CT services that are most attractive to your physicians and patients, do it most efficiently, and grow your value with the full support of GE Healthcare education, training, and uptime services.

Revolution ACTs : It's exactly what's needed to help you achieve success. And exactly what you'd expect from GE.



Clinical excellence everyday





“Our goal is sustainable growth.”

All businesses depend on sustainable growth, either by deepening relationships with current customers or attracting new ones – or both. Capture new opportunities by offering referring physicians and patients higher levels of clinical results while maintaining a stable economic foundation.

Investment security

Protect your investment by choosing the latest technology platform. Revolution ACTs features a host of modern innovations such as the new Clarity panel detector. A product designed to deliver better ROI and quick break-even.

Engineered for lower operating costs

Benefit from a proven compact geometry platform that has a small footprint to ease siting and installation. A new compact generator helps reduce power consumption over time.

Expand your clinical reach

Revolution ACTs provides all the essential tools and advanced clinical applications needed as you grow your referral network to support the routinely scheduled scans to the unexpected trauma, stroke, or vascular scans.

Stay up and running

Benefit from the support of a large and experienced network of GE Healthcare field and online service engineers. Our global and local supply chain helps to ensure high quality spare parts are readily available should you need them.



“We want to offer more services while still managing costs.”

Improve your ability to provide CT scan services while managing the overall cost of care. Revolution ACTs can help reach more patients and enables them to benefit from a full range of care that includes CT while they're there, 24/7.

Do more for more patients

Increase your ability to image a wide variety of inpatients. Revolution ACTs features and functions are tuned to serve every patient – from emergency and trauma to pediatric and from the elderly to larger sized patients.

Ready when you are

Be prepared at all times with innovations like a power management system that cuts detector warm up time. Once patients arrive, our intelligent workflow with many automated tools helps you achieve efficiency and higher throughput.

Reduce workflow variability

Increasing consistency can help reduce costs, too. Every hospital is distinct and has specific needs – and innovative technologies like Digital Tilt, Emergency Scan Mode, and Spectral Calibration help you achieve consistent workflow outcome.



“We want to provide a more informed diagnosis.”

Patients are counting on you. It's purposely designed to help you deliver higher quality results with more consistency and speed.

Impact patient care more profoundly

You'll clearly see more with the new Clarity panel detector design that delivers a spatial resolution of 18 lp/cm. And Revolution CT-based electronics with DAS on Detector (DoD) helps lower noise by 20% for better image quality.

Manage radiation more precisely

Provide dose-conscious care to your patients with ASiR* – our iterative reconstruction technology that can lower dose up to 40% at comparable image quality. Smart Dose gives you access to an array of dose reduction technologies for pediatric to the elderly and high BMI patients.

More anatomical detail and clinical confidence

Technologies like ultra-kernel with sub-millimeter imaging gives you sharp high resolution images to see anatomical structures in detail and clarity. Designed to support your advanced studies with Smart Prep and Dynamic transition along with applications such as Auto Bone Xpress and Vessel IQ

*Option available on Revolution ACTs EX only

Technologies that revolve around you

Designed with your needs in mind, Revolution ACTs helps you improve standards of patient care by providing new levels of image quality, patient safety, economic value, and advanced applications. Powering these advances is a host of integrated, largely exclusive technologies.

**Higher Performance
Clarity panel detector**

Clarity panel detector: An innovative detector technology is an industry first to introduce a segmented panel design with many design elements inherited from our premium Revolution CT.

Improved spatial resolution

Clarity panel detector delivers exceptional spatial resolution of 18 lp/cm to enable high quality imaging and visualization of anatomy in 3D.

Up to 20% lower electronic noise

An integrated detector design built with modern chipsets and DAS on detector (DoD) technology used in our premium Revolution CT to lower noise and achieve high signal to noise performance.

Low power efficient design

A compact and power efficient design, each detector module consumes a paltry 2mW per channel. Intelligent thermal management is tightly integrated within the detector so it is ready to scan within minutes.

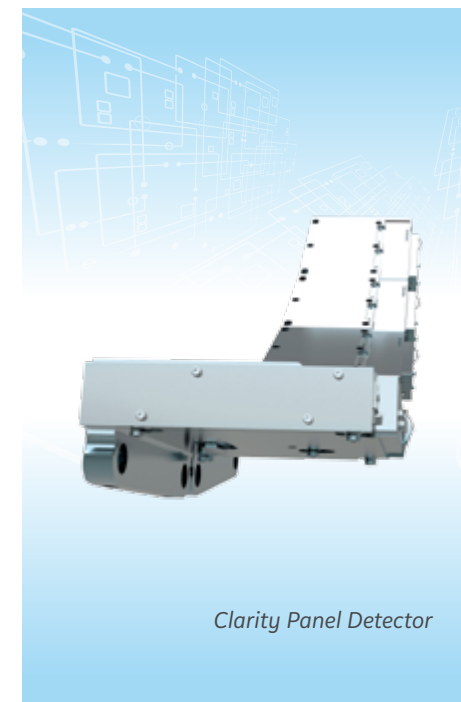
**Higher Performance
– improved imaging chain**

Ultra Kernel

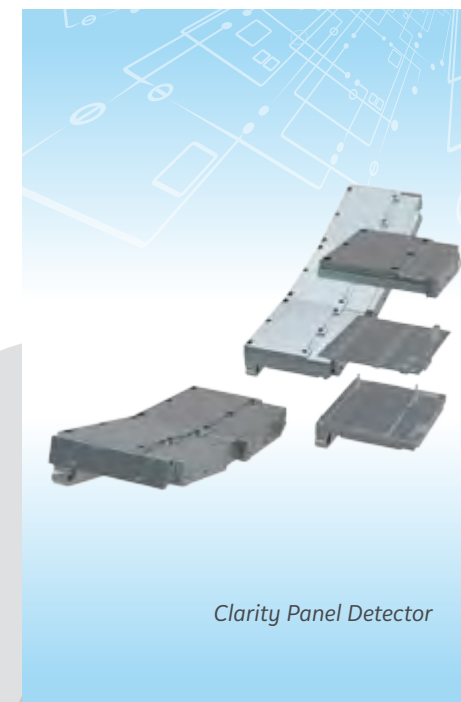
Adaptive Enhance Level Adjustment (AELA) can improve visual spatial resolution while maintaining pixel noise standard deviation. This kernel may be helpful in enhancing the visualization of small anatomical structures with high contrast.

Advanced Acquisition*

A higher sampling density provides better representation of the original signal and can potentially lead to improved image quality and fidelity. Using GE's novel conjugate cone beam reconstruction algorithm, the conjugated rows of projections are considered jointly in the back projection step and delivers improved Z-axis visualization performance.



Clarity Panel Detector



Clarity Panel Detector

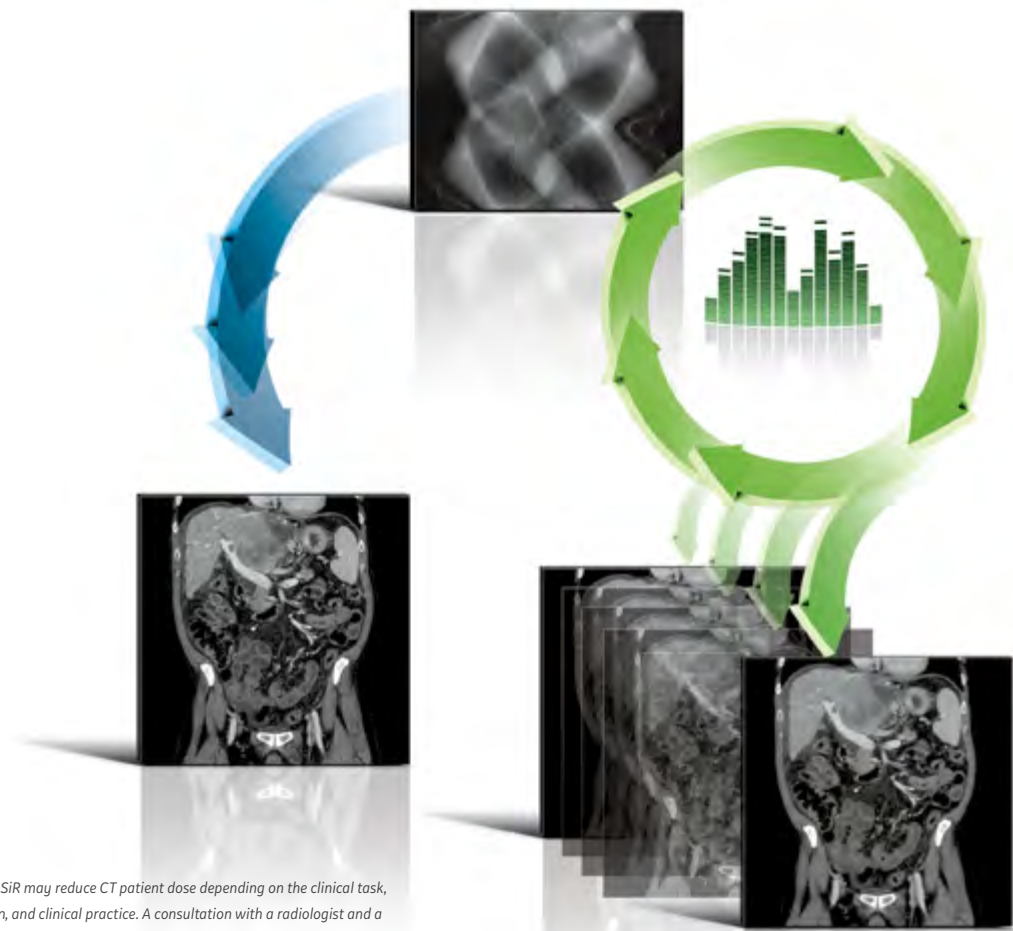
*Option available on Revolution ACTs EX only

Smart Dose Technologies

Intelligent technology designed to help you acquire high-quality images using lower doses of radiation, contributing to more accurate diagnoses and lower exposures for patients

ASiR™* Image quality at significantly lower dose

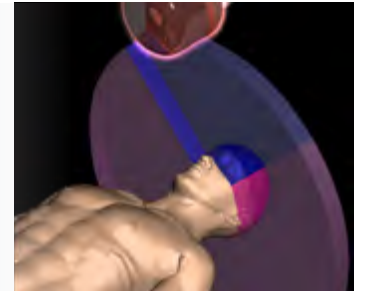
- ASiR is an advanced iterative reconstruction technique that provides breakthrough image quality in multi-slice CT exams at significantly less dose than before. It allows healthcare providers to lower dose by up to 40%** to your patients as compared to standard image reconstruction without reducing imaging quality.
- ASiR uses sophisticated statistical modeling to remove noise in images while preserving anatomical detail. It improves low-contrast detectability and can have equivalent IQ to an acquisition with 1.67 times the mA.
- The maximum tube power and current of ASiR allows achieving the same image quality at a lower mA with less tube heat output, which enables the tube for longer duration under helical scan.
- Revolution ACTs performance will be equivalent to 40 KW and 333 mA (@120 kV, 3.3 MHU tube heat capacity equivalence with ASiR). This improved efficiency helps lower power consumption and operational costs to the administrators.



*In clinical practice, the use of ASiR may reduce CT patient dose depending on the clinical task, patient size, anatomical location, and clinical practice. A consultation with a radiologist and a physicist should be made to determine the appropriate dose to obtain diagnostic image quality for the particular clinical task. Low contrast detectability (LCD), image noise, spatial resolution and artifacts were assessed using reference factory protocols comparing ASiR and FBP.

**Option available on Revolution ACTs EX only

Smart Dose Technologies



Volumetric Image Space Reconstruction (ViSR): An advanced filter helps manage photon starvation in large-size patients as well as wide or dense anatomical objects such as shoulders and pelvis. A 3D filter reduces noise without compromising resolution, for clear visualization of brain, tumor, and pediatric cases. ViSR delivers up to a 20% improvement in image quality at the same dose, or the same image quality with up to a 36% dose reduction.

Organ Dose Modulation (ODM): ODM was developed as a virtual shield and to provide the dose reduction goal of a shield material, without the negative effects it might have on imaging performance. Reduce radiation does up to 40% when imaging superficial tissues such as breasts and the eyes.

Dose Check - for more peace of mind:

Receiving notifications and alerts if your predetermined dose levels will be exceeded enables you to correct and confirm the right settings before scanning to avoid unnecessary radiation dose to your patient.

3D mA Modulation - the right dose for each individual:

This feature enables the system to optimize tube current in x-y and z directions with negligible effect on the image quality. The system varies mA according to the patient shape and scan protocol to lower dose in a patient-centric manner.

DoseWatch™ - effectively manage dose over time:

With this comprehensive dose management solution, you can keep dose levels as low as is reasonably achievable (ALARA) while producing sharp, focused diagnostic images. Track and monitor patients' cumulative radiation dose over time and take steps to prevent an excessive radiation dose.

Work smarter



- **Digital Tilt:** This advancement in image reconstruction technology enables you to scan patients more efficiently — up to 28% in routine scan workflow. The entire workflow is easy to setup and control from the CT console to acquire images along the desired tilt angle. Simpler and faster, digital tilt helps you manage the challenging and less cooperative patients, while completing the scan with the quality you need.
- **Spectral Calibration:** See an improvement in image uniformity in off-centered scans using a unique technology for beam hardening correction that makes patient positioning and setup more robust to operator variability.
- **IQ Enhance:** This advanced algorithm enables helical pitch acceleration up to 2.7x while still achieving the same image quality as a conventional scan. Completing scans faster helps your patients breathe easier with shorter breath hold time.
- **User Console:** Inspired by our most premium product, Revolution CT, the console for Revolution ACTs has been designed from the ground up to make it easy to learn and use. Its modern look and feel is created from insights obtained from a wide cross section of radiologists and technologists.

Revolution ACTs workflow

- Set up head cushion
- Adjust table for patient's procedure
- Adjust center line
- Fix patient head
- Confirm scan parameters
- Start scan
- Scan using tilted image reconstruction

Confirm images
Release patient

up to
28% faster

Traditional workflow

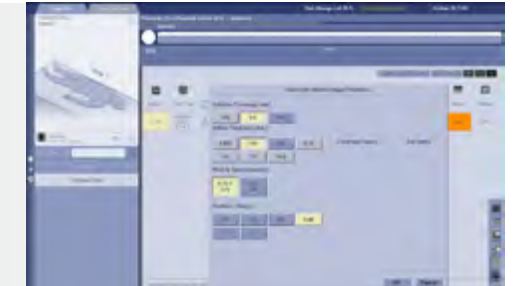
- Set up head holder
- Move patient into holder position
- Adjust table for patient's procedure
- Adjust center line
- Adjust OM line
- Adjust tilt angle
- Start scan
- May need to repeat steps for proper patient positioning and tilt
- Scan using standard image reconstruction

Confirm images
Release patient

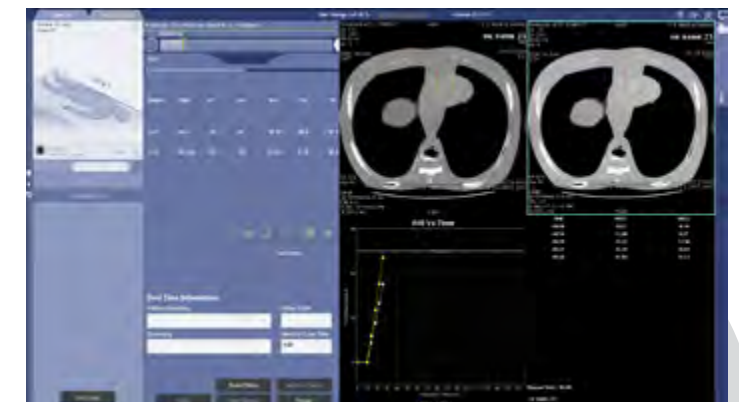
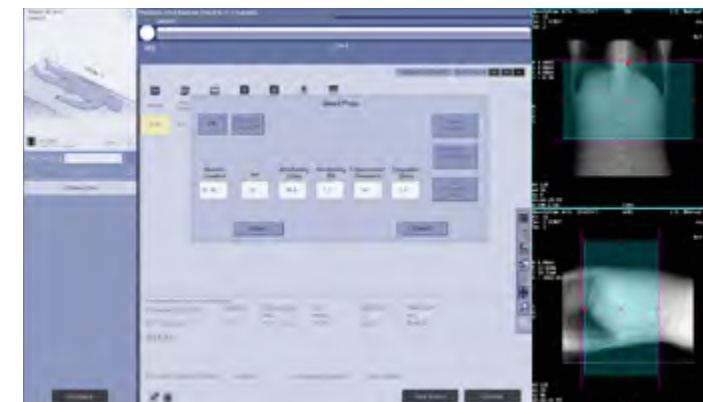
Patient on the table

* Actual results may vary depending on the circumstances, including but not limited to, exam type, clinical practice, and image reconstruction technique. This information was based on a simulation using the GE Revolution ACTs device and is presented for illustrative purposes only.

Essential and advanced applications



- **Volume Viewer:** Harness the power of Volume Viewer to make 3D visualization routine. Get more information about the spatial relationships of different structures using multi-object volume rendering, multi-planar reformat, and MIP/min-MIP.
- **Navigation and Fly-Through:** Use Virtual Endoscopy to visualize intra-luminal structures such as airways, sinuses, or vascular structures. A virtual “fly-through” mode lets you view images dynamically.
- **SmartPrep with Dynamic Transition:** SmartPrep allows intermittent monitoring of IV contrast enhancement in an area of interest using low-dose scan. Dynamic transition provides automatic transition from monitor phase to scan phase
- **Vascular Imaging and Processing:** Allows enhanced analysis of vascular features by automatically determining vessel centerline and tracking multiple vessels. You can also view oblique cross sections of vascular images, and rotate curved views to more clearly visualize vascular lesions.
- **CT Colonography:** Provides quick, accurate, non-invasive colon exams. Prone and supine views can be displayed and synchronized together. You can even conduct a 3D fly-through that resembles an optical colonoscopy. Bookmarking tools mark polyp location, and distance and ROI tools quantify size and homogeneity.
- **DentaScan:** Creates a comprehensive set of cross-referenced composite axial, panorex, and oblique planar reformations of the mandible and/or maxilla. DentaScan gives you the information you need to plan dental implants or orthodontic surgery.
- **CT Perfusion 4D - Multi Organ CT Perfusion 4D** - Multi-organs is an image analysis software package that allows the evaluation of dynamic CT data following an injection of a compact bolus of contrast material, and generating information regarding changes in image intensity over time.



A world of support

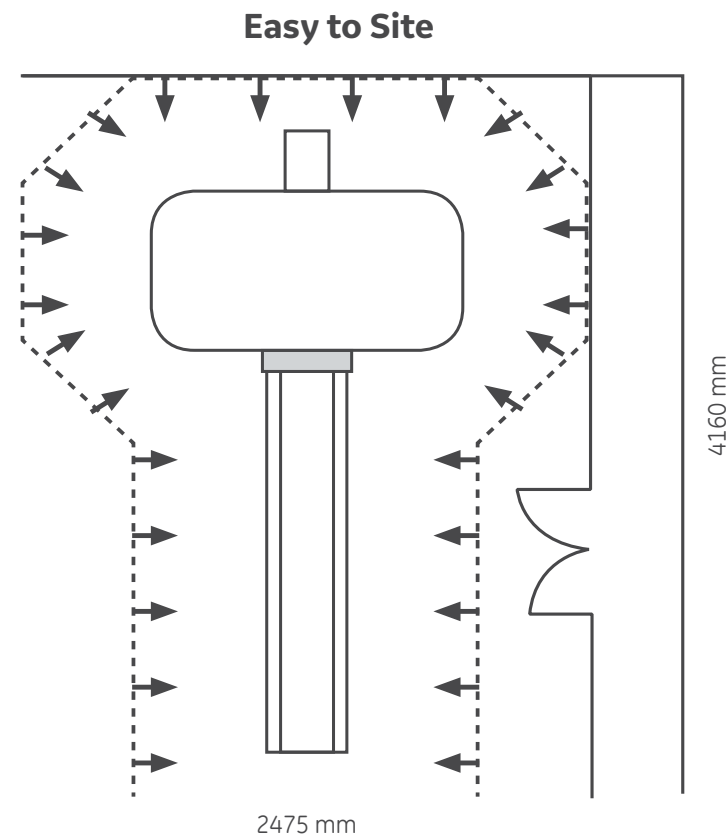
When we created Revolution ACTs, we thought as much about helping you get the most out of it as we did about the technologies that went into it.

For your peace of mind

Revolution ACTs has a footprint of only 8.0m² lowering siting space needed. A low power input requirement of only 40kVA makes installation simpler and lowers power consumption.

In addition to user training and applications education, count on GE Healthcare to support you with a large and experienced team of field service engineers to help increase your system uptime and access.

Your Revolution ACTs scanner features a broadband connection capability with built-in self-check systems to connect your CT scanner directly to our technical centers. So GE service engineers can quickly assess any problem. Often they can fix your system remotely.



What are your aspirations?

In the end, Revolution ACTs is about helping you provide better patient care to more patients in an affordable way. Revolution ACTs is designed in a way that reduces the typical tradeoffs you face between quality and affordability. Revolution ACTs gives you investment security by opening the door to a host of modern technologies; a more informed diagnosis with higher image quality and wider array of clinical applications; and a patient centric workflow and dose management.

Since physicians began scanning patients with GE CT systems in 1976, few companies can point to the same number of advances to help healthcare providers take better care of their patients and do it more economically.

Your reputation depends on making the right choices. Ours depends on helping you make them.

Contact your GE sales representative to learn more.

Call us now on
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or write to us at
teamgehc@ge.com





www.gehealthcare.com

GE Healthcare provides transformational medical technologies and services to meet the demand for increased access, enhanced quality and more affordable healthcare around the world. GE (NYSE:GE) works on things that matter - great people and technologies taking on tough challenges. From medical imaging, software & IT, patient monitoring and diagnostics to drug discovery, biopharmaceutical manufacturing technologies and performance improvement solutions, GE Healthcare helps medical professionals deliver great healthcare to their patients.

Imagination at work

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Revolution ACTs has not been submitted to, approved or cleared by the US FDA. Not for sale in the US.