Explore a new beginning in radiation therapy planning

Discovery CT590 RT
For those who dedicate their lives to treating and beating cancer, certain character traits rise above the rest.

They must be **precise**, enhancing targeting accuracy for the best possible treatment plan.

They must be **productive**, transforming scans to plans when time is critical.

They must be **proactive**, meeting their patients’ needs today while anticipating their needs of tomorrow.
This calling takes a certain type of clinician. So its practice requires a certain kind of tool.

Discovery™ CT590 RT—a new beginning in radiation therapy CT simulation.

It is precise, offering CT image quality, soft tissue visualization, and patient positioning to enable precise treatment planning. It is productive, applying new automated 4D workflow and proven virtual simulation applications that boost speed and efficiency. And it is proactive, meeting their patients’ needs, being prepared for emerging therapy technologies, and monitoring your system to fix problems before they happen.

It takes extraordinary clinicians to battle cancer on behalf of their patients. GE Healthcare helps them do it.
Be precise.

Discovery CT590 RT delivers outstanding precision. That means precise imaging for excellent edge detection and clear definition of tumors in motion. Precise patient positioning for accurate tumor contouring allows for optimized dose calculation. And precise treatment planning toward the outcomes sought by you and your team.

Precise patient positioning

Patients can be positioned accurately using our TG66-compliant tables, which facilitates accurate treatment planning and delivery. A stiffer cradle made from an advanced composite fiber helps keep patients steady. The TG66-compliant tables have weight capacities ranging from 500 lbs to 650 lbs, and are compatible with many radiation oncology accessories.

With a generous 80-cm wide bore, a 65-cm display field of view, and a state-of-the-art patient table design, the Discovery CT590 RT gives you the flexibility and freedom you need to position patients precisely.
Precise contouring

ASiR reconstruction technology may enable improvement in low contrast detectability. Low contrast detectability is one of the important factors in obtaining an accurate contour.*

Precise treatment planning

**MicroVoxel™**

Exclusive microVoxel technology in the Discovery CT590 RT gives you the optimum choice of reconstructed voxel size and sub-millimeter slice thickness. This technology offers the ability to resolve smaller structures, enabling accurate contours and treatment plans.

**Advantage™ 4D**

Advantage 4D respiratory gating solutions offer a new way to plan radiotherapy precisely for tumors in motion. This breakthrough application features integrated respiratory gating technologies, including Varian RPM.™ Clinicians can now capture the full range of motion of critical internal structures and lesions during respiration to target moving tumors for gated or ungated treatment. And you have full flexibility for either retrospective or prospective gating. Our simple solutions are built to enable seamless workflow from scan to plan, offering flexible options for clinical cases.

*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.
Be productive.

Precision alone is not enough to meet the needs of the most demanding clinicians. The right system must also improve workflow, boosting the productivity of your team when time matters most. The Discovery CT590 RT delivers the optimized workflow needed for high throughput, as well as virtual simulation tools that offer the information quickly.

Easy as 1, 2, 3... 4D

Our 4D respiratory gating solutions are fast and simple to use providing seamless workflow from scan to plan. With flexible options for all clinical cases.

• Auto 4D provides motion assessment before a patient is released from the scanner, in as little as four minutes.
• Auto 4D allows 4D images to be automatically binned, networked and available for AdvantageSim™ MD or your treatment planning system within 90 seconds or less.
Virtual Simulation

**AdvantageSim™ MD**
Sophisticated yet simple, this CT simulation application produces precise data for the accurate localization, identification, beam definition, and verification before treatment. High-resolution DRRs and outstanding low-contrast resolution help you visualize tumors. Multi-modality, multi-phase simulation — a complement to GE’s pioneering 4D technology — and multi-organ auto segmentation improve the accuracy and speed of therapy planning.

**Integrated Registration**
With Integrated Registration, CT, MR, PET and SPECT datasets can be automatically registered helping clinicians to target critical structures with confidence.

**Accuracy**
For exceptional accuracy, rigid and deformable algorithms are optimized to anatomical regions and imaging modalities.

**Speed**
For the sake of speed, automatic fusion takes otherwise time-consuming image registration down to seconds, while auto-propagation of results makes multiple registration steps unnecessary. This is particularly valuable in 4D multi-phase and multi-sequence MR studies.

**Ease of Use**
Results can be seamlessly exported to GE AdvantageSim or other Treatment Planning System.
Be proactive.

The Discovery CT590 RT puts you on the forefront of patient care by connecting with today’s premier technology and being prepared for tomorrow’s advancements. Because in cancer care, patients count on clinicians to be mindful of both their current condition—and their future well being.

In combination with GE’s top-ranked service, the Discovery CT590 RT provides the opportunity to be proactive in both patient care, and business planning.

Service technology built for communication and action

Our diagnostic imaging equipment contains valuable technology that goes far beyond delivering critical information to clinicians. Our systems also feature proprietary tools designed to keep the operation of your system worry-free.

*iLinq™*

*iLinq* on-demand support saves valuable time for both you and your patients, letting your technologist contact a GE engineer right from the imaging console. The engineer can log in to your system and help diagnose system issues, then and there.

*InSite™ Remote Diagnostics*

InSite Remote Diagnostics help keep your operations smooth by integrating your equipment with the GE digital services network. This allows our engineers to easily “see” inside your system, evaluate, diagnose and often resolve technical issues remotely.

*InSite Knowledge Center*

InSite Knowledge Center lets GE engineers solve your problems more quickly. By storing results from thousands of actual service experiences, we are able to access our collective expertise easily.
Peak performance in every aspect of cancer care

Advanced equipment. Skilled clinicians. Caring staff. All are essential to cancer care — but only as effective as the care delivery processes behind them. GE Healthcare can help you optimize the operational side of cancer care so that your healing capabilities have the greatest impact. Using process improvement methodologies and technologies, our Performance Solutions experts can show you how to streamline the flow of patients and staff, utilize assets and control costs more effectively, identify ways to reduce medical errors, and optimize your service lines.
Connect to a broader spectrum

Treatment planning is an important aspect of cancer care — but we know it’s only one of many. GE is dedicated to connecting the full spectrum of oncology care.

Rely on a partner who can deliver a comprehensive portfolio of products and services. Ultimately, we’re helping our customers to make better informed and smarter decisions in their patients’ care. By connecting the entire spectrum of care, we help ensure that you stay connected — to both your practice and your patients.
Discover our connected portfolio

GE’s oncology portfolio has been certified for the new “Integrating the Health Environment – Radiation Oncology” (IHE-RO) standard.* Our broad oncology portfolio includes a range of products to help you serve your patients’ needs. Diagnostic imaging equipment delivers the information clinicians need to make critical decisions. Breakthroughs in life sciences help support the latest oncology research. Our medical diagnostics products aid in understanding disease from the beginning, while our flexible IT solutions deliver the right information when and where it’s needed.
