



GE HealthCare debuts AI-supported solution, designed to improve and shorten the radiation therapy workflow, at ASTRO 2025

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- Early adopters of Intelligent Radiation Therapy (iRT) to date have reduced simulation to treatment planning time from seven days to seven minutes¹ via integration with RayStation® by RaySearch Laboratories
- The new version of iRT enhances connectivity, uses insights to improve efficiency, and includes a solution to manage workflows for the emerging field of theranostics
- GE HealthCare will spotlight its comprehensive radiation oncology portfolio at its booth, underscoring the company's commitment to accelerating global access to radiation therapy

CHICAGO--(BUSINESS WIRE)--Sep. 25, 2025-- GE HealthCare (Nasdaq: GEHC) today announced updates to Intelligent Radiation Therapy (iRT), a new version of the company's software solution for radiation therapy workflow management, designed to reduce the time it takes for patients to go from diagnosis to treatment. The iRT solution is AI-supported by GE HealthCare and third-party applications, and the latest features bring enhanced connectivity to the systems radiation oncology departments use most and use insights to improve departmental efficiency. The company also unveiled a new capability for theranostics that manages these complex workflows throughout the patient treatment journey, extending its expertise in radiation therapy workflows to this evolving field. The latest updates will be showcased at the American Society for Radiation Oncology (ASTRO) 2025 Annual Meeting in San Francisco for the first time.

iRT seeks to improve workflow efficiencies

Radiation therapy is a treatment nearly 60% of cancer patients² receive, yet it can take up to 30 days³ just to begin. Radiation oncology workflows are complex, and teams work across many systems, but these systems rarely connect, contributing to possible treatment delays and errors. As a result, staff often re-enter the same data in multiple places, wasting time and increasing the risk of errors. Simple tasks, like importing treatment data, can take up to 17 manual steps. These inefficiencies can lead to potential inaccuracies that result in delayed treatments for patients and potentially poor outcomes.⁴ Today, hospitals worldwide are adopting iRT's vendor-neutral solution that manages data between systems to streamline the complex radiation therapy workflow, designed to enable a shorter timeline to treatment for patients and reduce workload for clinicians. Early adopters of iRT to date have seen the time reduced from seven days to seven minutes⁵ to go from simulation to treatment planning with integration of iRT and RayStation by RaySearch Laboratories. iRT delivers new features including:

- **Analytics reporting:** gives department administrators a holistic view to analyze efficiency, identify operational gaps, and document trends.
- **Staff scheduler:** accounts for out of office schedules using an intelligent resource management tool to optimize staffing, helping to reduce treatment delays.
- **Auto-segmentation of organs at risk by MR Contour DL⁶:** uses AI to outline sensitive organs near the tumor so they can be protected during treatment, a process that was previously entirely manual. iRT has enabled connection with a GE HealthCare developed AI-model, MR Contour DL, for MR imaging and is interoperable with third-party devices MVision Contour+ for CT imaging, in addition to current interaction with MIM Contour ProtégéAI+™.
- **VERT virtual reality app from Vertual Ltd:** connects to a third-party application that allows clinicians to walk patients through a simulation of the treatment process, helping reduce the fear of the unknown, and uses advanced 3D models to enhance staff training.
- **Greater connectivity:** integrates with the systems radiation oncology departments use most, with a vendor-neutral approach, including electronic medical records (EMR), oncology information systems (OIS), and other fast healthcare interoperability resources (FHIR).

"We are transforming the radiation therapy experience for patients and clinicians with our Intelligent Radiation Therapy solution, helping clinicians move from diagnosis to treatment in minutes, not days," says Ben Newton, GE HealthCare's general manager for Oncology Solutions. "We're thrilled to share the latest features in iRT designed to bring greater precision, efficiency, and personalization to cancer care."

Introduction of iRT for theranostics

Theranostics is a branch of nuclear medicine that uses molecular imaging and targeted radionuclide therapies aimed at the same biological target to treat cancer in the body and is gaining interest for advanced-stage cancer outcomes. These therapeutic and diagnostic technologies work together to enable a personalized, highly precise, patient-centric approach to medical diagnosis and treatment. Today, many steps of the workflow are manual, which is further complicated by the significant communication and triage needed to facilitate a patient's treatment plan, leading to wasted doses of medication or delayed treatments.⁷

The iRT features for theranostics aim to bring a unified view to this highly complex treatment. It integrates with EMRs and OIS to give a holistic view of the patient journey and guide clinicians step-by-step through patient intake, patient assessment, scheduling, medication dosing, dosimetry, and clinical reviews.

“Miami Cancer Institute is pleased to collaborate with GE HealthCare on iRT, an innovative solution designed to address the rapidly evolving landscape of radiopharmaceuticals,” said Dr. Ranjini Tolakanahalli, director of photon physics at Miami Cancer Institute, part of Baptist Health South Florida. “Together, we are developing a solution where clinical priorities shape design, ensuring future solutions are informed by real-world medical expertise.”

Full suite of radiation oncology solutions on showcase at ASTRO 2025

GE HealthCare will also showcase the latest versions of the following radiation oncology solutions aimed at improving radiation oncology outcomes for patients at ASTRO 2025:

- **MIM Maestro:** Now with a reirradiation and composite plan assessment workflow, MIM Maestro empowers clinicians to make confident treatment decisions in scenarios where clinicians are evaluating multiple past treatments. Clinicians can visualize any number of prior external beam radiation therapy (EBRT) plan doses on current anatomy and account for radiobiological effects—all within a single, flexible workflow. Using rigid or deformable image registration, dose is accurately adjusted per structure, while iterative planning enables comparison of multiple treatment options and comprehensive dose visualization for EBRT plans from any vendor.
- **iRT MR Direct Solution:** The iRT advanced AI solution enables MRI-only RT Planning for Brain/Head and Neck/Pelvis. iRT MR Direct complements GE HealthCare’s proven AIR RT Suite MR-simulation solution and is designed to help clinicians within each workflow step, from positioning to contouring and simulation for RT planning. iRT MR Direct includes:
 - **MR Contour DL:** An AI-enabled application that automatically contours organs-at-risk (OAR) for head and neck and pelvis on MR images.
 - **MRI Planner:** An AI-enabled technology from Spectronic Medical that generates synthetic CT images from MR images for dose calculation.

Additionally, GE HealthCare is hosting a lunch symposium, “Converging beams: Radiation therapy meets radioligand therapy,” on Sept. 28 at 12:00 p.m. PT. This expert panel will explore the underlying biological rationale and emerging clinical evidence, while also delving into real-world implementation strategies for combining these modalities across diverse oncology program settings.

To learn more about GE HealthCare’s oncology care solutions, please visit booths #225 and #325 at the Moscone Center in San Francisco, CA from Sept. 28 – Oct. 1 or visit this [ASTRO event page](#).

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 Based on two InstaPlan (iRT + RayStation by RaySearch) clinical studies in Europe based on a total of 20 patients. Any results achieved using InstaPlan may vary based on differences in workflows, patient populations or other factors.

² American Society for Radiation Oncology. Radiation Oncology Case Rate (ROCR) Report. June 26, 2023. <https://www.astro.org/ASTRO/media/ASTRO/Advocacy/PDFs/ROCRReport.pdf>.

³ <https://research.gehealthcare.com/across-the-enterprise/4-benefits-of-open-architecture-jb34091xx-in-intelligent-radiation-therapy-irt/>

⁴ Gopan, Olga, Jing Zeng, Avrey Novak, Matthew Nyflot, and Eric Ford. 2016. “The Effectiveness of Pretreatment Physics Plan Review for Detecting Errors in Radiation Therapy.” *Journal of Applied Clinical Medical Physics* 17 (5): 16–31. <https://doi.org/10.1118/1.4961010>. [1](<https://aapm.onlinelibrary.wiley.com/doi/pdf/10.1118/1.4961010>)

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⁶ Not available in all regions.

⁷ GE HealthCare internal data. Results may vary. The statements by GE HealthCare customers are based on their opinions and results achieved in their unique setting. Since many variables exist (i.e., size, case mix, etc.), there can be no guarantee that other customers will achieve the same results.

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