GE HealthCare Launches New Era of AI-Enhanced, Personalized Oncology Solutions at ESTRO 2024 Congress

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- Company unveiling innovations which harness the power of AI to optimize the complex radiation therapy workflow and enable personalized, more timely care for patients across the cancer care continuum

CHICAGO--(BUSINESS WIRE)--May 1, 2024-- GE HealthCare (Nasdaq: GEHC) today announced Revolution RT,[i] a new radiation therapy computed tomography (CT) solution with innovative hardware and software solutions to help increase imaging accuracy, while simplifying simulation workflow for a more personalized and seamless oncology care pathway experience for clinicians and patients. The new Revolution RT is being unveiled at the European Society for Therapeutic Radiology and Oncology (ESTRO) 2024 Congress in Glasgow, along with an updated and artificial intelligence (AI)-enhanced version of the Intelligent Radiation Therapy (iRT) platform, which interfaces with the Spectronic magnetic resonance imaging (MRI) Planner. Additionally, the company will showcase the newly acquired MIM Software portfolio, as well as other key innovations from GE HealthCare.

One of the biggest challenges of oncology care is the complexity of the disease — both in the many varieties of cancer, and the disparate ways it can present in each individual patient[ii] — requiring diligence and personalization in diagnosis and treatment. Additionally, treatment often requires the expertise of multiple disciplines and experts related to specific organs and systems in the body, resulting in potential delays to diagnosis and timely treatment. According to research published by the British Medical Journal (BMJ), the mortality risk increases 6-13% for every month a diagnosis is delayed[iii], therefore, it is critical to streamline the complex oncology care pathway and reduce the time from diagnosis to treatment, ultimately leading to improved patient outcomes.

“At GE HealthCare, we are committed to advancing the frontiers of oncology treatment through AI-driven technologies that transform and optimize the care continuum,” said Dr. Taha Kass-Hout, chief technology and science officer of GE HealthCare. “Our showcase at ESTRO this year highlights innovations that will allow clinicians to view the patient’s anatomy with great accuracy, helping facilitate precise tumor targeting while aiming to protect nearby healthy tissue. By integrating these capabilities into our systems, we create a precise, more connected, and efficient care environment that accelerates the delivery of personalized and timely care, with the goal of enabling better patient outcomes. This comprehensive approach empowers clinicians around the globe to tackle the most challenging disease states with precision and efficiency.”

GE HealthCare’s novel radiation therapy solutions, and recent acquisition of the MIM Software portfolio, are designed to reshape the oncology experience around the needs of providers and their patients across the cancer care continuum:

Introducing Revolution RT

As healthcare systems around the world experience growing volumes of radiation therapy (RT) patients, providers are looking for a CT simulator that enables precision simulation while reducing workflow complexity, with the goal of expediated patient care.[iv]

GE HealthCare designed its new Revolution RT[i] with a wide-bore CT platform and high-performance radiation therapy simulation, diagnostic, and interventional capabilities to accommodate more patients, and create a more streamlined standard of care. Revolution RT includes precision radiotherapy simulation that will help enable more accurate imaging, while improving workflow and efficiency, and using deep learning technology to help image the patient with accuracy.

Updated Intelligent Radiation Therapy (iRT)

At ESTRO 2024, GE HealthCare will also be showcasing the newly updated iRT platform, which was originally launched at ESTRO 2023. This innovative solution enables greater interoperability, connectivity, and efficiency throughout the entirety of the radiation oncology care continuum and includes key features such as an integrated workflow that connects various applications into an intuitive single interface, multi-vendor interoperability, seamless data transfer and task automation, and a catalog of RT applications from both GE HealthCare and third parties.

The company is unveiling multiple updates to the iRT platform, which highlight its vendor-agnostic ecosystem:

- MR Direct (with Spectronic Medical): Spectronic Medical’s application, which is integrated into the updated iRT, uses AI to convert MR simulation images into an equivalent CT image that can be used for RT dose calculation.
- Simplified Planning (with MIM): Advance interoperability with automated context launching to simplify pre-treatment planning steps including image viewing, segmentation, and fusion.
- InstaPlan (with RaySearch): A novel approach to treatment plan creation while the patient is still on the simulation table. This is a paradigm shift that can potentially reduce the time between simulation and first radiation dose. GE HealthCare’s collaboration with RaySearch will bring further innovation in simulation and treatment planning workflows to support advancements in Photon, Electron, Particle, and Brachy therapies.
- Personalization: The newly enhanced version of iRT is updated to allow user-enabled personalization, analytics, and notification modules.

“The key to better patient outcomes in oncology care requires solutions that simplify and shorten an incredibly complex workflow for providers, as well as personalize the care pathway for patients, in order to ensure more effective care for each individual,” said Dr. Ben Newton, general manager,

Oncology at GE HealthCare. “GE HealthCare worked closely with clinicians globally to develop the iRT platform which streamlines the radiation therapy pathway by connecting disparate multi-vendor application systems, creating a vendor-agnostic ecosystem and harnessing the power of AI to potentially reduce the critical time between treatment planning and first treatment.”

Advancing AI and Digital Solutions for More Personalized Oncology Radiation Therapy

GE HealthCare recently announced the acquisition close of MIM Software and the addition of its imaging analytics and digital workflow offerings as a part of the company’s portfolio. MIM Software's clinical tools – paired with GE HealthCare's imaging solutions – bring improved flexibility, automation, and efficiency to providers. This includes the addition of MIM Software’s radiation oncology portfolio, which is designed to provide clinicians with complementary interoperable solutions that can help simplify complex planning and deliver faster treatment.

Additionally, the MIM acquisition enabled the expansion of GE HealthCare’s relationship with Elekta , a leader in precision radiation oncology. GE HealthCare’s MIM Software portfolio will enhance Elekta’s innovative treatment planning software which aids in the delivery of radiation therapy through enabling precision dose calculation. The collaboration is expected to harness MIM Software and Elekta’s respective strengths in regional markets to make solutions available globally.

This news complements GE HealthCare and Elekta’s existing global collaboration agreement , which enables the two companies to provide hospitals with a comprehensive offering across imaging and treatment for cancer patients requiring radiation therapy.

To learn more about GE HealthCare’s latest innovations within oncology care, please visit the ESTRO 2024 Congress booth #220 in Glasgow from May 3-7 or visit the website here.

About GE HealthCare Technologies Inc.

GE HealthCare is a leading global medical technology, pharmaceutical diagnostics, and digital solutions innovator, dedicated to providing integrated solutions, services, and data analytics to make hospitals 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 the care pathway. Together our Imaging, Ultrasound, Patient Care Solutions, and Pharmaceutical Diagnostics businesses help improve patient care from diagnosis, to therapy, to monitoring. We are a $19.6 billion business with approximately 51,000 colleagues working to create a world where healthcare has no limits.

Follow us on LinkedIn, X *(formerly Twitter)*, Facebook, Instagram, and Insights for the latest news, or visit our website https://www.gehealthcare.com/ for more information.

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[i] This product is not CE Marked and cannot be placed on the market or put into service until it has been made to comply with CE marking.

[ii] American Association for Cancer Research. Complexities of Cancer Explained for Patient Benefit. Available at: https://www.aacr.org/blog/2015/05/26/complexities-of-cancer-explained-for-patient-benefit/#:~:text=One%20of%20the%20biggest%20complexities,organs%20often%20behave%20very%20differently . Last accessed February 2023.

[iii] T. P. Hanna, W. D. King, S. Thibodeau, M. Jalink, G. A. Paulin, E. Harvey-Jones, D. E. O’Sullivan, C. M. Booth, R. Sullivan, A. Aggarwal. Mortality due to cancer treatment delay: systematic review and meta-analysis. The BMJ. DOI: 10.1136/bmj.m4087

[iv] CT Sub Segment Dashboard based on COCIR, Ispos, EMA, JP-KPI sources.

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