GE Healthcare at RSNA 2022
Pharmaceutical Diagnostics

NEWS BRIEF

GE Healthcare Pharmaceutical Diagnostics develops and manufactures pharmaceutical imaging agents used to support over 100 million patient imaging procedures per year - equivalent to three patient procedures every second - across all major care pathways. With over 4000 employees globally and seven current Good Manufacturing Practice (cGMP) manufacturing sites, Pharmaceutical Diagnostics products are used in 130+ countries.

Recent news announcements focus on two themes - **innovation** and **addressing global demand for iodinated contrast media,** which GE Healthcare expects to double in the next years. All these developments aim to bring more imaging agents to healthcare professionals to support clinical decision-making for their patients.

Recent Innovation News

Reducing CT procedure setup time, optimizing contrast dose and reducing wasted contrast media

At RSNA 2022, GE Healthcare announced an agreement with ulrich medical for a GE Healthcare branded contrast media injector in the U.S. The CT motion multi-dose syringeless injector, which delivers iodinated contrast media for Computed Tomography (CT) imaging procedures, reduces procedure setup time and increases patient throughput by eliminating time consuming preparation steps, while helping to optimize patient dosing and reduce wasted contrast media.

Recent research, led by Dushyant Sahani MD, Professor and Chair of Radiology at the University of Washington and presented at the 2022 Radiological Society of North America (RSNA) Congress, demonstrates that when compared to a typical dual-syringe based injector using single or multi-dose vials, the CT motion may enable six additional patient CT exams each day in a busy Emergency Department, with up to three minutes saved per patient. The research, which analyzed over 6,000 patients who received Contrast Enhanced CT or CT Angiography, also shows CT Motion reduces cost from consumables and saves an average 30 mL of contrast per procedure.

Helping differentiate Dementia with Lewy Bodies from other forms of dementia

GE Healthcare's DaTscan - already used around the world in the clinical evaluation of Parkinsonian syndromes - has been approved by the U.S. FDA for use in patients with suspected Dementia with Lewy Bodies (DLB). This new indication is in addition to its use with SPECT imaging to visualize dopamine transporters (DaT) in the brains of adult patients with suspected Parkinsonian syndromes. With the expanded indication, DaTscan is now available to more patients, including those with suspected DLB, in the United States. This new indication enables clinicians to use DaTscan to help differentiate DLB from other forms of dementia. Early and accurate diagnosis of DLB can help ensure specific appropriate treatment and specialized care for patients, while enabling them and their caregivers to more effectively manage the disease and plan for the future.

Understanding the metabolic environment of tumors, to inform and improve immunotherapy selection

Two investigational PET imaging radiotracers have been added to GE Healthcare's immuno-diagnostic portfolio, to enable patient selection and monitoring in immunotherapy trials. The two Telix Pharmaceuticals Limited (ASX: TLX, Telix, the Company) agents complement GE Healthcare Pharmaceutical Diagnostics' pipeline of investigational imaging tracers for use by pharmaceutical companies in clinical trials, with the potential to predict and monitor response to immunotherapy. Currently an average of only 20-40 percent of patients respond to

immunotherapies, and patient suitability is typically determined by taking tumour biopsies.

Phase III clinical trial finds [^{18}F]flurpiridaz could improve detection of coronary artery disease

GE Healthcare and Lantheus Holdings Inc (NASDAQ: LNTH) announced that the recent Phase III clinical trial of their investigational radiotracer, [^{18}F]flurpiridaz, met its co-primary endpoints of exceeding a 60 percent threshold for both sensitivity and specificity for detecting Coronary Artery Disease. The findings also demonstrate [^{18}F]flurpiridaz PET has higher diagnostic efficacy and image quality in patients with suspected CAD, compared with SPECT Myocardial Perfusion Imaging, the predominant procedure used in nuclear cardiology today. If approved, this investigational agent would offer the advantages of ^{18}F, with broad available distribution and a half-life of almost two hours, removing the need for it to be manufactured in the immediate vicinity of the imaging department. This longer half-life could also make Flurpiridaz (^{18}F) Injection suitable for exercise stress testing, which is not feasible with existing cardiac PET radiotracers.

Supporting the evaluation of adult patients with suspected Parkinsonian syndromes

Earlier this year, GE Healthcare announced the first patient dosed in the Phase III clinical trial for a PET radiopharmaceutical imaging agent which aims to assist in the evaluation of adult patients with suspected Parkinsonian syndromes, support research and improve patient care. Already a global leader with DaTscan, used around the world in SPECT imaging, GE Healthcare is now planning to bolster its portfolio with two pipeline radiopharmaceuticals, one for PET and one for SPECT. Globally, the number of people with Parkinson's disease is estimated to double from 6.9 million in 2015 to 14.2 million in 2040.

Addressing Growing Demand for Contrast Media

Growing Active Pharmaceutical Ingredients production capacity to enable more contrast media

GE Healthcare Pharmaceutical Diagnostics is investing $80 million to increase manufacturing capacity by 30 percent at its Active Pharmaceutical Ingredients (API) site in Lindesnes, Norway. The API produced at the facility is used in over 100 million patient doses of GE iodinated contrast media annually, equivalent to three patient procedures every second. Iodinated contrast media is used in X-ray and Computed Tomography (CT) procedures around the world to enhance visualization of organs, blood vessels and tissues across disease pathways. This investment, along with the recent opening of a new production line at GE Healthcare's Cork, Ireland, fill and finish facility, is part of a broader commitment to produce of 30 million more patient doses per year by 2025 to address growing demand, driven by increasing global prevalence of chronic disorders and growth in CT procedures.

Securing more iodine for more contrast media

GE Healthcare Pharmaceutical Diagnostics announced a long-term agreement with Chile-based mining company, Sociedad Quimica y Minera de Chile S.A. (SQM) (NYSE: SQM; Santiago Stock Exchange: SQM-B, SQM-A), to secure its supply of iodine, a key ingredient for contrast media products used in X-ray and Computed Tomography (CT) procedures globally. The agreement will see SQM increase supply of iodine raw material year-on-year and is part of GE Healthcare's broader commitment and investment plan to enable the production of 30 million more patient doses of iodinated contrast media annually by 2025, to address growing demand.

Recycling iodine by returning unused contrast media

Iodine is a non-renewable resource. Around one-quarter of globally produced iodine is used in contrast media, which is not typically recycled. With global demand increasing, reducing wasted unused contrast media is increasingly important. In some markets, GE Healthcare offers a service to collect and return unused iodinated contrast media that otherwise would be left unused. Under the recycling initiative, hospitals are provided with containers to safely store any uncontaminated and unused contrast media. Once full, the container is sealed and returned to GE Healthcare's Active Pharmaceutical Ingredients (API) facility in Lindesnes, Norway, using existing distribution routes, where the collected material is then reprocessed to produce additional contrast media.