

Philips Announces New Development of the World's First Spectral Detector Angio CT Solution



- Leiden University Medical Center joins global network of partners in the development of Philips Spectral Angio CT suite and its use in clinical research, bringing spectral CT imaging technology into an integrated hybrid angio CT suite with the aim of innovating a range of treatment procedures
- CIRSE 2022 presentation by University of Insubria (Varese, Italy) details positive results of study that uses spectral CT to better guide lung tumor biopsies
- Philips and University of Pennsylvania announce collaboration to investigate spectral CT guidance during interventional oncology
 procedures and its potential to confirm treatment effectiveness in real time

Royal Philips, a global leader in health technology announced new milestones in the development of the world's first spectral detector angio CT solution - Philips Spectral Angio CT suite* - bringing the company's breakthrough spectral CT imaging technology into an integrated hybrid angio CT suite. By combining its award-winning [1] Spectral CT 7500 system and its Image Guided Therapy System - Azurion with FlexArm - in a fully integrated interventional suite solution, Philips aims to give physicians immediate access to these two key imaging modalities in a single room, enabling innovation in minimally-invasive procedures in areas such as oncology, stroke, and trauma care.

Philips today announced a new clinical partner and highlighted clinical studies that focus on the added value of using spectral CT imaging technology during interventional procedures.

Expanding Philips' clinical network

Leiden University Medical Center (Leiden, the Netherlands) has joined Philips' global network of clinical partners to investigate how its spectral detector angio CT solution could potentially offer new treatment opportunities and improve patient care.

We are excited to co-create an innovation that could play a defining role in improving patient care in the space of interventional oncology.

Mark Burgmans, MD

Head of Interventional Radiology at Leiden University Medical Center

"We are excited to co-create an innovation that could play a defining role in improving patient care in the space of interventional oncology," said Mark Burgmans, MD, Head of Interventional Radiology at Leiden University Medical Center. "Adding spectral CT imaging to the interventional suite will enable us to offer new treatment opportunities, avoid moving patients from one imaging suite to another, and offer the unique benefits of spectral CT information when you need it."

Other leading clinical institutes that Philips is working with on this innovation are Mayo Clinic (Rochester, MN, U.S.) and Baptist Health's Miami Cardiac & Vascular Institute (Miami, FL, U.S.).

Philips Spectral Angio CT suite combines the company's latest diagnosis and treatment technologies. Philips Image Guided Therapy System – Azurion with FlexArm – is the company's next-generation image-guided therapy platform, integrating best in class imaging systems, software, and specialized diagnostic and therapeutic devices to support exceptional treatment for the most complex procedures. The addition of Philips' award-winning Spectral CT 7500 system means physicians only need one scan to capture all the spectral information required to differentiate and quantify different tissues. Spectral CT enables improved detection, delineation, and quantification of lesions, leading to better-informed planning for minimally-invasive procedures and more precise interventions. It has already proved its worth in other areas of oncology - for For personal and private use only. Reproduction must be permitted by the copyright holder. Email to copyright@mindbyte.eu.

example, it has demonstrated higher sensitivity in detecting malignant findings and improved readings of incidental findings [2][3]. With its ability to improve tissue characterization, the Spectral CT 7500 offers significant benefits over conventional CT.

Through continuous research, Philips is building clinical evidence that supports the added value of spectral CT imaging for diagnosis and treatment guidance.

Research results show better targeted biopsies using spectral CT guidance

At this year's Cardiovascular and Interventional Radiological Society of Europe Annual Meeting (CIRSE 2022, September 10-14, Barcelona, Spain) a presentation is being given by Filippo Piacentino, interventional radiologist at the University of Insubria (Varese, Italy), on the value of spectral CT imaging guidance for performing high-confidence tumor biopsies [4]. The results being presented illustrate the potential for Philips' spectral CT technology to better guide biopsies by distinguishing between active and non-active regions in a tumor. Ensuring that a biopsy contains a high number of actively dividing cancer cells is important for high-confidence diagnosis.

"With conventional CT, large masses may appear as a largely uniform mass, making highly targeted biopsy difficult," said Filippo Piacentino. "By fusing images from Philips' XperGuide live needle guidance with images from spectral CT, that are color-coded based on the effective atomic number of tissues and provide a large amount of additional information, we can now investigate the possibility of obtaining better defined biopsy targets with a fewer number of inconclusive biopsies."

New clinical collaboration on reduction of the risk of tumor recurrence

Philips also today announced a research collaboration with the University of Pennsylvania (Pennsylvania, PA, U.S.) to study the practicality of using spectral CT-based tissue temperature mapping to provide real-time feedback during tumor thermal ablation procedures to confirm its effectiveness before the patient leaves the room. This will potentially reduce the risk of localized tumor recurrence.

"Announcing these important milestones in the development of our unique Philips Spectral Angio CT suite shows our strong commitment and progress in co-creating the future of image-guided therapy," said Karim Boussebaa, General Manager of Image Guided Therapy Systems at Philips. "By combining the best of our award-winning modalities into a single suite we aim to unlock new treatment approaches that could benefit both patients and their physicians."

Visit Philips at CIRSE 2022

To learn more about Philips Spectral Angio CT suite, <u>visit Philips at CIRSE 2022</u> and join the Philips symposia in which leading physicians will share their latest clinical insights on using this new imaging approach in interventional oncology. You can register via our dedicated <u>CIRSE 2022</u> <u>webpage</u>.

Source: Philips

Reference

- [1] Minnie Award for Best New Radiology Device
- [2] Analysis by Aarhus University Hospital Aarhus, Denmark. Results from case studies are not predictive of results in other cases. Results in other cases may vary.
- [3] Analysis by University Hospital Cleveland, USA. Results from case studies are not predictive of results in other cases. Results in other cases may vary.
- [4] Filippo Piacentino, 'Spectral CT as innovative imaging guidance in large lesions lung biopsies. XperGuide and Z-effective fusion for more defined targets, more diagnostic samplings and more biomarkers information'. CIRSE 2022

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^{*} Not available for sale in some geographies, please reach out to your Philips representative for products and services in your area.