

## United Imaging Expands to France: Cutting-Edge uMI 550 PET/CT Installed at Evesio Jossigny



<u>United Imaging</u>, a renowned leader in the field of advanced imaging solutions, continues to expand its global reach. We are proud to announce the first installment of our cutting-edge technology in France. The increasing number of state-of-the-art healthcare facilities deciding to leverage our unique diagnostic solutions stands as a testament to our unwavering effort toward engineering imaging solutions that hold the potential to transform patients' lives worldwide.

The Evesio nuclear medicine center in Jossigny, part of the Centres de Médecine Nucléaire (CMN) group's network of imaging centers in the Île-de-France region, has just joined the esteemed global family of United Imaging. With a steadfast commitment to expanding access to diagnostic technology and harnessing the latest advances in nuclear medicine, CMN Group provides a comprehensive range of nuclear medical imaging services, including scintigraphy, PET scans, and SPECT. Striving for excellence, the Evesio Nuclear Medicine Center in Jossigny has made the strategic decision to install uMI 550, our high-resolution digital PET/CT system that is bound to surpass all expectations.

The uMI 550 epitomises one of United Imaging's core missions - to democratise state-of-the-art digital PET technology, ensuring accessibility to a broader spectrum of customers than ever imagined.

A vast array of unique technological solutions has been meticulously engineered to distinguish the <u>uMI 550</u> as a leading positron-emission tomography/computed tomography (PET/CT) machine on the market.

Seamlessly integrating groundbreaking features, our integrated light guide digital PET detector sets a new benchmark for imaging quality in the field. Integrated Light-Guide significantly improves light collection efficiency and spatial resolution, while SiPM technology increases photoelectric conversion efficiency to reduce signal loss. The ultra-fine crystal size significantly enhances image resolution. As a result, the large 24 cm axial digital PET field of view (FOV) provides exceptional image quality with 2.9 mm NEMA resolution that considerably improves quantitative accuracy and small lesion detectability, empowering healthcare professionals to offer a diagnostic process of unprecedented level of precision.

Fully integrated with the 80-slice CT system and relying on the advanced Z-Detector, the uMI 550 allows for obtaining diagnostic CT images with high spatial resolution and improved low contrast detectability. Thanks to the highly integrated architecture, the Z-Detector achieves significant overall noise reduction and high image quality while maintaining a low radiation dose. Similarly, given that no radioactive sources are required for automatic daily quality control, the radiation exposure to the operator has been also reduced. Last but not least, due to the use of high-performance material, the high conversion efficiency of gadolinium oxysulfide boosts the X-ray conversion rate while effortlessly maintaining a quick response time.

As United Imaging takes an active part in the artificial intelligence revolution, our devices leverage the powerful capabilities of this transformative technology. The uMI 550 has been constructed with the CNN-based iterative reconstruction engine trained with uEXPLORER® total-body PET data and AI-empowered workflow to predict low-noise PET images and improve image contrast as well as enable high-speed-scanning while maintaining outstanding image quality. As a result, the uMI 550 allows for whole-body scanning in 4-bed positions within 8 minutes. Aiming to limit the need for repeat scans, the data-driven head motion correction algorithm detects motion from list-mode data during patient scans and corrects motion blurring accordingly.

Our devices are built not only to meet the needs of large-volume treatment centres but also to provide absolute reliability in every demanding clinical scenario. For this reason, uMI 550 involves automated quality control programmes, multiple radiopharmaceutical support, and United Imaging's unique collaborative lifecycle approach.

We extend our thanks to Qualimedis, a leader in France in the distribution of quality control solutions in medical imaging and radiotherapy. Their support has made the partnership between United Imaging and The Evesio Nuclear Medicine Center in Jossigny possible. We are confident that the installation of uMI 550 at this modern diagnostic centre will significantly improve patients' access to advanced imaging modalities, supporting highly precise diagnoses and better treatment outcomes.

Source & Image Credit: United Imaging Healthcare

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