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## Next-Generation PET/CT Systems and Molecular Technology Platform by United Imaging



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Pioneering a new era of nuclear medicine and molecular imaging through new innovations

[United Imaging Healthcare](#) (UIH), a global leader in advanced medical imaging and radiotherapy equipment, introduces its next-generation PET/CT systems, the [uMI Panorama™](#), and the integrated molecular technology platform named uExcel, at the European Association of Nuclear Medicine (EANM) 2023 annual meeting taking place from September 9-12 in Vienna, Austria. As the sponsor of the “EANM Young Authors’ Award” and “EANM Technologists’ Award” of this year’s EANM, United Imaging is playing a significant role in driving innovation in the field of molecular imaging and nuclear medicine on a global scale.



EANM Congress Chair 2023-2025 Prof. Valentina Garibotto joined together with the President of International Business of UIH, Dr. Jusong Xia, and UIH Europe General Manager Lukasz Mizerka presented the EANM “2023 Young Author’s Award” to this year’s winners.

The new wide-bore uMI Panorama is a family of products that include the uMI Panorama, the uMI Panorama GS, and the NeuroEXPLORER. The new uMI Panorama features a 2.9 mm NEMA resolution, 35 cm axial FOV, 143cps/kBq effective system sensitivity, and 194 ps timing resolution, leading to unprecedented system performance. Notably, a uMI Panorama has recently been installed at the Huntsman Cancer

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**The uMI Panorama**

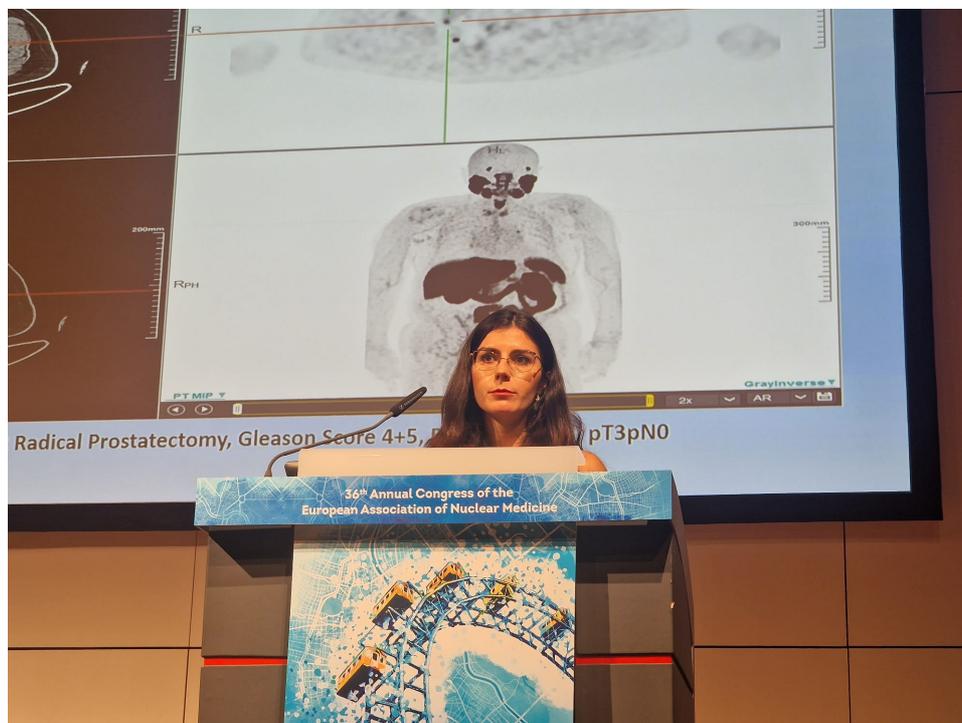
The uMI Panorama GS, deriving its name from the term “Gold Standard”, was born to set the gold standard in molecular imaging and revolutionize whole-body PET imaging. The uMI Panorama GS stands out as the flagship product of the uMI Panorama family, boasting a FDA 510(k) cleared & CE submitted PET/CT system with an impressive 148cm axial Field of View (AFOV), significantly facilitating whole-body imaging in a single bed position. Striving to enhance patient experience and broaden research areas, this system delivers exceptional capabilities for both functional and anatomical imaging and redefines quantification accuracy for lesion-detection precision. Additionally, this long axial FOV PET/CT system breaks the sub-200 ps limitation for the first time ever.



**The Model of uMI Panorama GS**

The NeuroEXPLORER (NX) is a revolutionary innovation for exploring the brain universe. Supported by the BRAIN initiative grant, created through partnerships involving Yale, UC Davis, and United Imaging, the NX was innovated to push forward the brain PET protocols and applications, and stands as the most advanced DOI-TOF PET/CT scanner globally.

In tandem with uMI Panorama, the uExcel, is an advanced molecular imaging technology platform meticulously integrated with both hardware and software components. This platform is dedicated to enhancing system performance, imaging capabilities, and overall functionality. Based on deep learning iterative reconstruction, the uExcel enables the uMI Panorama to improve image outcomes even in challenging scan conditions. Underpinned by artificial intelligence (AI), the uMI Panorama family offers quicker scans with reduced doses while simultaneously enhancing imaging quality and consistency across all clinical settings.



Dr. Joniada Doraku

United Imaging's whole portfolio of MI products greatly empowers clinical and research studies. At the satellite symposium, Dr. Joniada Doraku from Ospedale Sacro Cuore Calabria Hospital related how she has unleashed the power of the digital PET/CT uMI 780 in her clinical practice. She showcased the high resolution of uMI 780 and the superior image quality it can bring by reporting its satisfactory performance in tumor and neurological diagnosis. Reviewing the contribution made by [uEXPLORER](#) to Zhongshan Hospital of Fudan University over the past four years, Dr. Hongcheng Shi noted that uEXPLORER greatly simplifies PET/CT examinations and expands the scope of PET clinical applications with its 194cm AFOV and high sensitivity. Drawing on the clinical cases he presented, uEXPLORER delivers comprehensive disease assessment, caters to specific needs with fast scans, provides abundant information through dynamic studies, facilitates low dose scanning, and ensures low radiation, cost-effectiveness, and high-quality imaging. Dr. Jeffrey Yap from Huntsman Cancer Institute discussed how the uMI Panorama is redefining imaging performance standards and the intelligent streamlined workflow. Dr. Li Huo from Peking Union Medical College Hospital also praised uMI Panorama. Through a series of tests conducted on over 1800 patients using more than 15 different radiopharmaceuticals with uMI Panorama in just one year, she has revealed numerous innovative clinical applications for this PET/CT scanner. These applications are particularly noteworthy in the field of clinical translational research, which encompasses the use of multiple novel tracers. Dr. Richard Carson focused on the design and applications of NeuroEXPLORER (NX), revealing its strong performance as a human brain PET imager in highly precise spatial resolution, highly high sensitivity, and highly accurate head motion estimation. He commended NX for its potential achievements in radiation dose reduction, methodological improvements, and new brain imaging paradigms including small brain structures imaging, low-density binding-site identification, spinal cord imaging, dynamic neurotransmitter release, and small within-subject changes measurement.

United Imaging has consistently been at the forefront of innovation in the molecular imaging field in Europe. The journey in Europe began with the installation of the first digital PET/CT system in Poland in 2019, and in early 2022, United Imaging further expanded its footprint in Europe with the installation of the uMI 780 in Italy. This year, the National Institute of Oncology Marie Curie Skłodowska has also installed uMI 780.



Visitors at EANM

Celebrating its one-year anniversary since its IPO, United Imaging has reached a new milestone by providing high-end medical imaging equipment to over 11,300 clinical and research institutions in more than 60 countries worldwide. Since its establishment, United Imaging has remained committed to pushing the boundaries of medical innovations and fostering collaborations with globally renowned clinical and scientific research institutions, including but not limited to Yale University, Washington University in St. Louis, and the University of Texas. As of today, United Imaging has introduced over 90 groundbreaking products, all of which have had their core technologies developed in-house.

Source: [United Imaging](#)

(Note: The uMI Panorama and the uMI Panorama GS are CE pending, not commercially available yet. Mentioned Products/features may not be available in all countries.)

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