

Agios Andreas Hospital Installs Greece's First High-Resolution Digital PET/CT from United Imaging



Through close collaboration between [United Imaging](#) and Papapostolou Healthcare Technologies, a leading provider of high-tech medical equipment and technical support, Agios Andreas General Hospital of Patras is set to enhance its diagnostic capabilities with the installation of the uMI 550. This state-of-the-art device delivers a new standard of quality in the field of Digital Positron Emission Tomography–Computed Tomography (PET/CT).

Advancing Molecular Imaging at One of the Peloponnese's Largest Medical Institutions

Situated in Patras, Greece's third-largest city, Agios Andreas Hospital is a cornerstone of healthcare for the region. Spanning five specialised buildings, this hub of medical expertise is home to a team of dedicated doctors and nurses delivering top-tier care in fields ranging from ophthalmology and cardiology to plastic surgery and paediatrics. With a capacity of 400 beds—188 dedicated to internal medicine and 192 to surgical care—Agios Andreas plays a pivotal role in providing comprehensive treatment to the local population. To elevate its diagnostic capabilities, Agios Andreas Hospital invested in cutting-edge PET/CT imaging technology, selecting the uMI 550 by United Imaging.

uMI 550 is a state-of-the-art solution representing the pinnacle of innovation in medical imaging, seamlessly integrating advanced functional imaging with unmatched anatomical precision. The uMI 550 stands out for its efficacy in detecting abnormalities at both the molecular and structural levels, offering unparalleled diagnostic accuracy and setting a new benchmark in molecular imaging.



Meet the Innovative Features Driving Imaging Excellence

The advanced Z-Detector

By leveraging cutting-edge through-silicon via (TSV) technology, it minimizes electronic noise and significantly enhances the signal-to-noise ratio (SNR), resulting in remarkably clear and precise imaging. The finely tuned voxel size ensures that even the smallest structures are depicted with remarkable accuracy, enhancing diagnostic capabilities. Plus, the gadolinium oxysulfide scintillator ensures swift and efficient X-ray conversion, making every scan faster and more effective.

Digital PET Detector

The Integrated Light Guide significantly boosts light collection efficiency and spatial resolution, while advanced SiPM technology minimises signal loss.

Together, these innovations enable our Digital PET Detector to deliver outstanding image quality.

Point-spread-function (PSF)

The groundbreaking PSF iterative reconstruction technique seamlessly integrates with advanced engineering solutions to achieve an impressive spatial resolution of 1.4mm, resulting in significant improvements in quantitative accuracy and the detection of small lesions.

Time of flight (TOF)

Thanks to the precise localisation of annihilation photons, our TOF technology accelerates image convergence with better contrast and considerably reduced image noise.

Innovative Head Motion Correction

Our data-driven motion correction technology utilizes an advanced algorithm to seamlessly detect and correct motion artifacts from list-mode data during patient scans. This sophisticated system effectively solves the issue of motion blurring, ensuring highly accurate imaging results.

Our Supportive Solutions Empowering Healthcare Practitioners

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Automatic Quality Control Workflow

With no radioactive source needed for automatic daily quality control (QC), our technology significantly minimises radiation exposure for operators. Additionally, the periodic full QC accommodates both liquid ^{18}F and solid ^{68}Ge sources with reduced storage requirements, ensuring greater flexibility and ease of use. The innovative fast NEMA tool streamlines the workflow, making quality control both convenient and highly efficient.

Integrated Oncology Application

The uMI 550 integrates seamlessly with a comprehensive solution package, enhancing tumor diagnosis and post-therapeutic evaluation directly from the operation console. This integration empowers healthcare professionals to elevate the management and care of oncological patients, driving improvements in diagnostic precision and treatment planning.

Expanding Patient Access to Advanced Imaging Technology Worldwide

At United Imaging, we are fully dedicated to revolutionising imaging solutions and enhancing patient care worldwide. Thanks to the partnership with Papapostolou Healthcare Technologies, we've successfully installed the uMI 550 at Agios Andreas General Hospital, furthering our mission to increase access to advanced diagnostics on a global scale.

Discover the power of our technology. Visit our website to learn more about the cutting-edge features of the uMI 550 -<https://eu.united-imaging.com/en/product-service/products/mi/umi-550>

Source & Image Credit: [United Imaging](#)

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