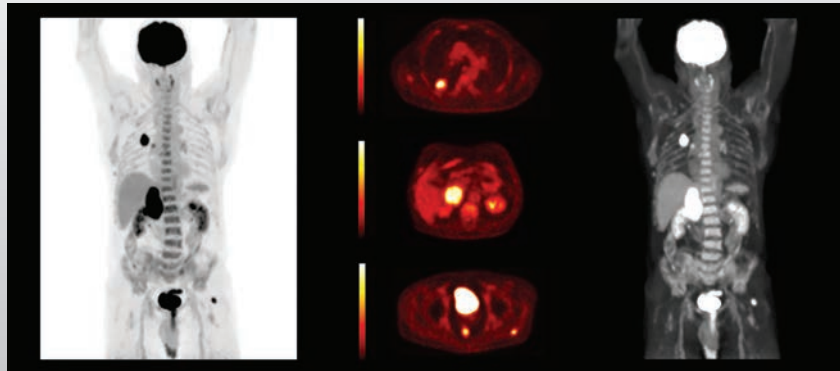


PET/CT Clinical Case Study Lung Cancer Follow-up

“ How can I provide an optimal patient experience and better access for oncology planning? ”



HISTORY

The 66-year-old male (172.48 lb) with a history of squamous cell carcinoma of the lung underwent PET/CT scan for follow-up. The scan was performed on a Celesteion™ PET/CT.

DIAGNOSIS

Hypermetabolic activity is seen in the following regions: right posterior upper lung with SUV up to 10; right hilar, pretracheal and subcarinal regions with SUV between three and four; right


adrenal with SUV up to nine and a new hypermetabolic activity left gluteus maximus with SUV value of eight.

MIP (Maximum Intensity Projection), Inverted MIP and Fused PET-CT images demonstrate primary right upper lung malignancy stable in size, enlarged right adrenal metastasis, new left gluteus maximus metastatic deposit, extremely FDG avid and stable mediastinal metastatic lymph nodes.

PET Parameters

Region Covered	Injected Dose	Acquisition Time	Number of Beds	Uptake Time	Glucose Level	Reconstruction
Skull to mid-thigh	13.9 mCi of ¹⁸ F-FDG	2 min/bed	7	45 min	106	TOF

CT Parameters

Scan Mode	Collimation	kVp	mAs	HP	Rotation Time	Scan Range	Dose Reduction	CTDIvol	DLP
Helical	1.0 mm x 16	120	SUREExposure™	15	0.5 s	980 mm		3.6 mGy	367.6 mGy·cm



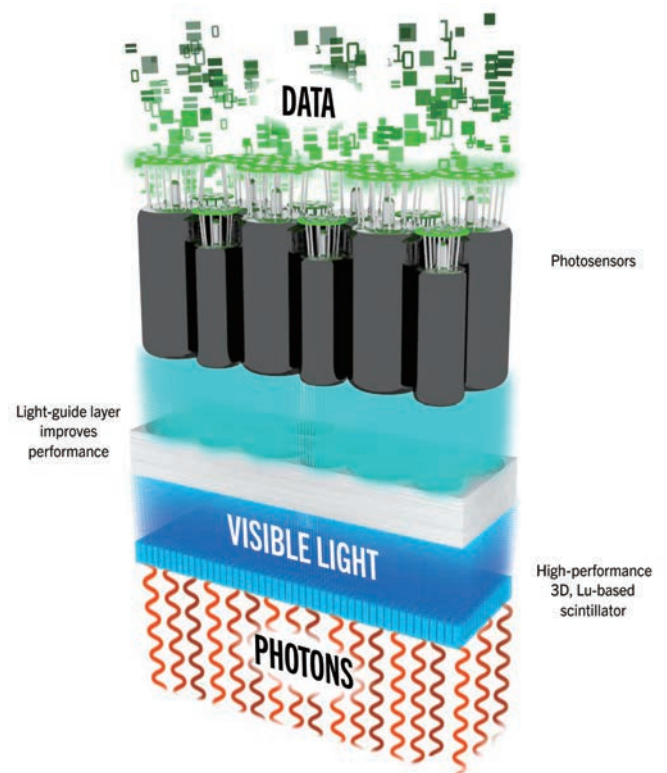
TECHNOLOGY

PET Detector

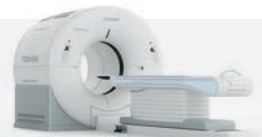
Celesteion's detector is uniquely designed for large bore PET, with optimal use of Lu-based scintillator materials and scalable detector modules with mixed PMT sizes. TOF performance at 450 ps timing resolution across entire range of activities provides optimal speed, image resolution, lesion detection and localization.

Bore Size and FOV

The 90 cm CT bore, 88 cm PET bore, 70 cm true FOV provides an optimal patient experience and better access for oncology planning and therapy positioning devices.



Toshiba gives you a voice. What's yours?



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