

## ***PET/CT***

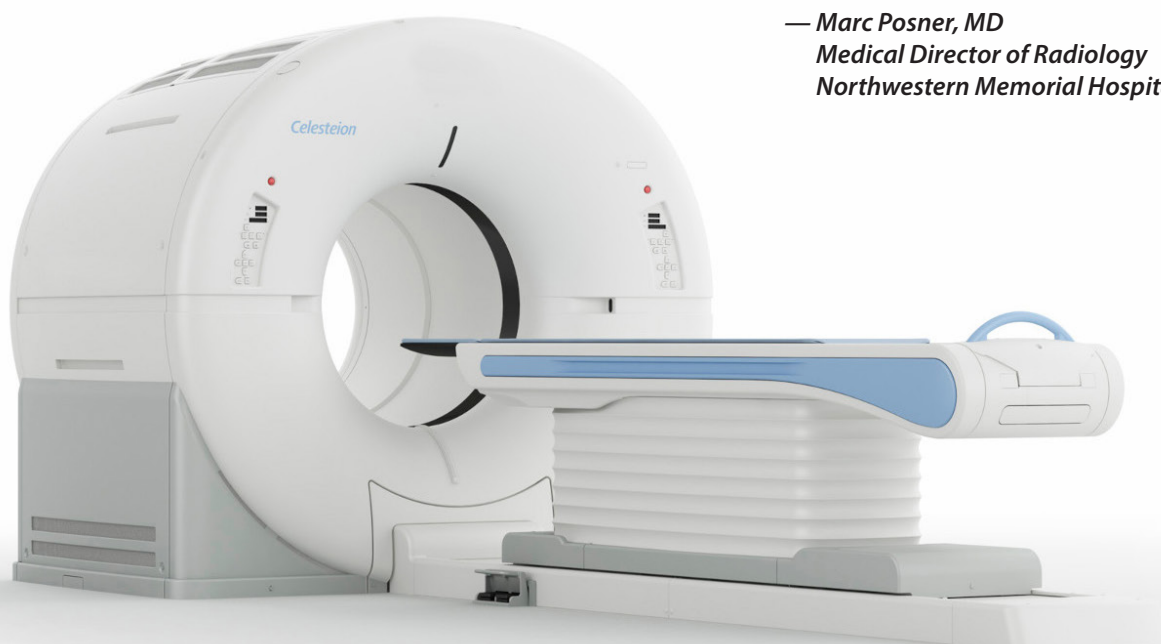
### **The Need for Easy, Consistent Acquisitions**

**"Standardizing** the RT workflow is considered essential to improve **RT treatment quality** and reduce miscommunication or human errors."<sup>1</sup>

### **Easy, Consistent Acquisition for Radiation Oncology**

"The technical advances in PET/CT are allowing us to advance the treatment through in radiation oncology and therefore the importance of the role of PET/CT scanning in radiation oncology."<sup>2</sup>

— **Marc Posner, MD**  
*Medical Director of Radiology  
Northwestern Memorial Hospital*



# Easy, Consistent Acquisitions

Automated workflows for reproducible, accurate simulations and treatment plans.

## High-Capacity Table

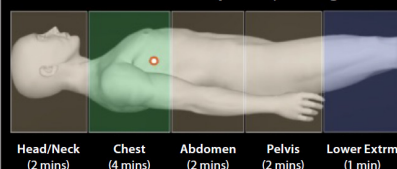


Ability to scan a greater range of patient sizes

- Cartesion Prime has 485 lb table
- Celesteion table has a 450 lb capacity

## Variable Bed Time (vBT)

### variable Bed Time and Respiratory Gating



Enables higher exam efficiency by adjusting the acquisition time for each bed position depending on body sizes and types of clinical exams

## Advanced intelligent Clear-IQ Engine (AiCE) Performance and Respiratory Gating

### AiCE for PET<sup>3</sup>

- Preserves SNR after count reduction<sup>4,5</sup>
- May provide clinicians flexibility to perform respiratory gating without the need to extend acquisition times

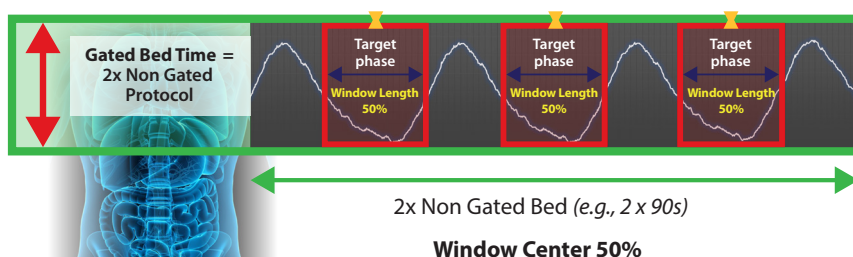
### Respiratory PET Gating<sup>3</sup>

- Creates motion frozen PET images
- Reduces respiratory motion artifacts

### 4D CT<sup>3</sup>

Enables respiratory gated scanning. Integrates seamlessly with a range of respiratory gating devices and can perform both phase and amplitude sorting. Scan parameters automatically set by the scanner based on the patient's breath cycle

- Helical scan mode, with phase and amplitude binning
- Volume scan mode with phase-based reconstruction



## SURE<sup>®</sup>Exposure

Dose modulation tool for personalized dose management

- Calculates the optimum radiation exposure for every exam
- Adjusts the dose for each patient based on a preset, targeted level of image quality, making it easy to use on all exams



## SURE<sup>®</sup>kV

Automated kV selection that is integrated into the protocols

- Integrated and easy to use
- Automated kV selection based on patient size, SUREExposure settings and clinical task
- Clinically targeted kV selections of 80, 100, 120, 135

<sup>1</sup> Journal of Applied Clinical Medical Physics, Clinical practice workflow in Radiation Oncology should be highly standardized, Journal of Applied Clinical Medical Physics Per Halvorsen, Nilendu Gupta, Yi Rong First published: 12 March 2019, Lancet 2021; 398: 171–84, Contemporary radiotherapy: present and future, Ravi A Chandra\*, Florence K Keane\*, Francine E M Voncken, Charles R Thomas Jr

<sup>2</sup> The clinical results, performance and views described are the experience of the clinicians. Results may vary due to clinical setting, patient presentation and other factors.

<sup>3</sup> Optional

<sup>4</sup> As compared to OSEM + PSF + Gaussian Post Filtering at 100% counts or without scan duration reduction

<sup>5</sup> Based on bench test results (10 mm sphere)

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