LANDAUER®

Publications Digest Featuring LANDAUER Scientists

Dose Optimization

Di Zhang, Ph.D., D.A.B.R. *Region Director*

- 1. Scarboro SB, Cody D, Alvarez P, Followill D, Court L, Stingo FC, Zhang D, McNitt-Gray M, Kry SF, **Characterization of the nanoDot OSLD Dosimeter in CT**, Medical Physics, 42(4), 2015
- Zhang D, Cagnon CH, DeMarco JJ, Cody DD, McCollough CH, Donna MS, Turner AC, Khatonabadi M, McNitt-Gray MF. Estimating Peak Skin and Eye Lens Dose from Neuro-Perfusion Examinations Using Monte Carlo Based Methods: Evaluation of the Performances of CTDIvol, TG111, and IMPACT Dosimetry Tool, Medical Physics, 40 (9), 2013
- Khatonabadi M, Zhang D, Mathieu K, Kim HJ, Lu P, Cody D, DeMarco JJ, Cagnon CH, and McNitt-Gray MF. A Comparison of Methods to Estimate Organ Doses in CT When Utilizing Approximations to the Tube Current Modulation Function, Medical Physics, 39, 5212, 2012
- Zhang D, Cagnon CH, Villablanca PJ, Cody DD, Donna MS, Zankl M, DeMarco JJ, McCollough CH, Turner AC, Khatonabadi M, McNitt-Gray MF. Peak Skin and Eye Lens Dose from Neuro-Perfusion CT Examinations Based On Monte Carlo Simulations, AJR, 198(2), 412-7, 2012
- Turner AC, Zhang D, Khatonabadi M, Zankl M, DeMarco JJ, Cagnon CH, Cody DD, Stevens DM, McCollough CH, McNitt-Gray MF. The Feasibility of Patient Size-corrected, Scanner-independent Organ Dose Estimates for Abdominal CT exams, Medical Physics, 38(2), 820-9, 2011
- 6. Mathieu KB, McNitt-Gray MF, Zhang D, Kim HJ, Cody DD. **Precision of Dosimetry-related Measurements Obtained on Current Multidetector Computed Tomography Scanners**, Medical Physics, 37(8), 4102-09. 2010

These sources are provided as helpful references. Please access articles directly from the publications cited.

LANDAUER: Setting the Pace of Radiation Safety™

Dose Optimization

Di Zhang, Ph.D., D.A.B.R. *Region Director*

- Turner AC, Zankl M, DeMarco JJ, Cagnon CH, Zhang D, Angel E, Cody DD, Stevens DM, McCollough CH, McNitt-Gray MF. The Feasibility of a Scanner-independent Technique to Estimate Organ Dose from MDCT Scans: Using CTDIvol to Account for Differences Between Scanners, Medical Physics, 37(4), 1816-25, 2010
- Chawla SC, Federman N, Zhang D, Nagata KT, Nuthakki S, Angel E, McNitt-Gray MF, Boechat MI. Estimated Cumulative Radiation Dose from PET/CT in Pediatric Patients with Malignancies - A five Year Retrospective Review, Pediatric Radiology, 2010 May;40(5):681-6
- Zhang D, Zankl M, DeMarco JJ, Cagnon CH, Angel E, Turner AC, McNitt-Gray MF. Reducing Radiation Dose to Selected Organs by Selecting the Tube Start Angle in MDCThelical Scans: A Monte Carlo Based Study, Medical Physics, 36(12), 5654-64, 2009
- Turner AC, Zhang D, Kim HJ, DeMarco JJ, Cagnon CH, Angel E, Cody DD, Stevens DM, Primak AN, McCollough CH, McNitt-Gray MF. A Method to Generate Equivalent Energy Spectra and Filtration Models Based on Measurement for Multidetector CT Monte Carlo Dosimetry Simulations, Medical Physics, 36(6), 2154-64, 2009