CMCU Digital Radiography (DR) Group Introduces Clinical White Paper on Intelligent Noise Reduction in Pediatric Radiography Study

Irvine, CA – Nov. 15, 2023 – Canon Medical Components USA (CMCU) - Digital Radiography (DR) (https://mcu.canon), global leaders in advanced flat panel detectors (FPDs), X-ray components, X-ray tubes, and innovative imaging software, introduces a clinical white paper, ***An Analysis of Canon Intelligent Noise Reduction Processing Applied to Pediatric Digital Radiographs,*** by Jonah Ice and Selena Yao. To view the white paper, go to:

https://mcu.canon/downloads_canon_com/cmcu/pdfs/Intelligent_NR_Clinical_White_Paper.pdf.

The company will showcase the clinical analysis of **Canon's Intelligent Noise Reduction** (**Intelligent NR**) that provides superior image quality while lowering radiation dosing in pediatric digital radiography at the [**Radiological Society of North America Annual Meeting 2023 (RSNA)**](), McCormick Place Convention Center, Chicago, IL Nov. 26 –29, 2023 in North Hall, Level 3, booth #7913.

The authors note that ionizing radiation is the basis for the production of diagnostic X-rays, however it has long been proven to increase the risk of cancer. The white paper evaluates the capabilities of Canon Intelligent NR and its deep learning neural network (DLNN) software in relation to standard and decreased dose pediatric digital radiographs at Dayton Children's Hospital, Dayton, Ohio.

According to Dr. Elizabeth Ey, chief radiologist and radiation safety officer at Dayton Children's Hospital, "The Canon DR system with the Intelligent Noise Reduction has produced images with lower noise content at a lower dose with no visible loss in image quality.This has allowed us to use doses that are 50% less than what we had been using in that room."

Conventional NR

Intelligent NR
DEEP LEARNING

Kentaro Fujiyoshi, marketing manager/national sales for CMCU, notes, "We are excited to introduce this study that confirms Canon's commitment to dose efficiency and image quality in radiographic imaging, benefiting both the patient and the physician."

The pediatric radiography study data suggests that Canon DR's deep learning Intelligent NR software is effective and assists radiologists in diagnostic imaging. The Intelligent NR technology is compatible with Canon's previously introduced CXDI flat panel detector (FPD) series. Compatible models are: CXDI-710C Wireless, 810C Wireless, 410C Wireless, 720C Wireless, 820C Wireless, 420C Wireless, and 420C Fixed.

To learn more about Canon Digital Radiography's innovative Intelligent NR software that provides exceptional noise reduction and superior X-ray images, please go to: **https://mcu.canon/downloads_canon_com/cmcu/pdfs/DRB-048REV.A_2nd_Intelligent_NR_brochure.pdf**.

ABOUT THE COMPANY:

Canon Medical Components U.S.A., Inc., https://mcu.canon – CMCU-Digital Radiography (DR), provides advanced components for X-ray systems including Flat Panel Detectors (FPDs), X-ray tubes, proprietary software, system components, and innovative video camera technologies used in surgical imaging, microscopy, inspection, and many other applications. A global leader in high image quality and digital radiography (DR) technology, CMCU provides a broad range of solutions, from wired / mounted detectors to wireless detector systems that meet the demanding requirements of radiology labs, medical imaging departments, and hospitals. The company, headquartered in Irvine, California, is celebrating its 25th year, having pioneered digital radiography technology by introducing the world's first DR detector in 1998.