Dynamic Digital Radiography Receives FDA Clearance

Wayne, NJ, April 23, 2019 – Konica Minolta Healthcare Americas, Inc., announces that the transformative technology introduced at RSNA 2018, Dynamic Digital Radiography (DDR), has received 510(k) clearance from the US Food and Drug Administration. DDR represents the next evolution in X-ray imaging with the ability to capture movement in a single exam and is a fundamental change in the way clinicians can utilize radiography.

DDR produces medical images that depict movement and can be fully annotated, including diagrams, to help radiologists provide a more detailed clinical finding. DDR, an enhanced X-ray technology, enables clinicians to observe the dynamic interaction of anatomical structures, such as tissue and bone, with physiological changes over time. By bringing advanced cineradiography capabilities to X-ray, a primary diagnostic tool that is widely available worldwide, DDR can help address global healthcare issues such as access, cost and quality of care. By providing quantifiable clinical information, DDR may increase the quality and specificity of diagnosis, helping clinicians rapidly answer clinical questions resulting in higher individualized care and reduced need for additional tests.

Two clinical areas where DDR can have an impact are in musculoskeletal (MSK) and thoracic imaging. DDR supports the diagnosis of MSK conditions by providing views of full patterns of articular mobility. Today, orthopedists rely on external motion and static X-ray to assess joint stability and spinal movement. With DDR, orthopedists and MSK specialists can acquire a full view of the MSK system in the supine and prone positions to view changes in the bone and articulations throughout the full range of motion. This information can be used to assess and monitor the spine and joints, such as the shoulder, knees, wrists and ankles, and enable the orthopedist or MSK specialist to provide a more detailed diagnosis quicker, reduce the need for additional imaging tests and enhance the quality of care.

In thoracic and pulmonary imaging, DDR provides a full view of chest, lung and organ movement during the respiratory cycle. DDR also helps quantify movement, enabling the radiologist and pulmonologist to provide an enhanced assessment of pulmonary function to help determine the cause for dyspnea (shortness of breath). The potential causes for dyspnea are extensive and there are numerous tests used in diagnosis. In one imaging exam, DDR helps clinicians assess lung function, track lung movement to detect asymmetry (latent, paradoxical, limited or no movement), and differentiate asthma, obstruction, restriction or mixed conditions.

Better decisions, sooner.
DDR may overcome the limitations of pulmonary function tests, spirometers and static X-ray images that cannot identify differences between the left and right lung. With DDR’s advanced image processing and enhancement, physicians may track lesions that move throughout the respiratory cycle and identify blood vessel patterns and parenchymal abnormalities or pulmonary embolisms in many cases without a contrast agent. A bone suppression algorithm may help physicians differentiate calcifications from bone structures. Additional measurement tools can help identify and quantify differences in lung movement, which can be used to estimate lung volume; an edge tracking tool provides a graphical representation of lung movement throughout the respiratory cycle.

“DDR is a paradigm shift in how X-ray may be utilized throughout the continuum of care, where an essential primary diagnostic tool can now deliver more information so clinicians can visualize anatomic structures and their interaction during movement in a way they have never seen before,” says Guillermo Sander, Director of Digital Radiography Marketing, Konica Minolta Healthcare. “There are immense opportunities for DDR to help clinicians enhance patient management and personalize care with potential cost savings by reducing the need for more advanced and expensive imaging tests.”

Konica Minolta is completing studies with clinical partners and will commercially release the technology later this year. The company will showcase orthopedic applications for DDR at the American Association of Orthopedic Executives (AAOE) 2019 Annual Meeting, May 5-8 in booth 307, and demonstrate thoracic and pulmonary applications for DDR at the American Thoracic Society International Conference, May 17-22 in booth 4636.

1, 2 2015 IMS National Hospital Radiology Procedure Volumes.

**About Konica Minolta Healthcare Americas, Inc.**

Konica Minolta Healthcare is a world-class provider and market leader in medical diagnostic imaging and healthcare information technology. With over 75 years of endless innovation, Konica Minolta is globally recognized as a leader providing cutting-edge technologies and comprehensive support aimed at providing real solutions to meet customer’s needs and helping make better decisions sooner. Konica Minolta Healthcare Americas, Inc., headquartered in Wayne, NJ, is a unit of Konica Minolta, Inc. (TSE:4902). For more information on Konica Minolta Healthcare Americas, Inc., please visit [www.konicaminolta.com/medicalusa](http://www.konicaminolta.com/medicalusa).