New Vitrea post-processing transforms the efficiency of imaging

The Charité University Hospital in Berlin, Germany, is one of the largest university clinics in Europe. It has 70,000 employees and more than 7,200 students, and currently deals with more than 140,000 patients per year. Before the Hospital started to work with Canon Medical, its IT environment included large PACS with local post-processing facilities, which required the use of a specific room for examining images. This was quite inconvenient for the staff and made increasing the efficiency and capacity of the department difficult. The Vitrea Advanced Visualization software from Canon Medical enables a huge step forward for the Radiology Department.

"We can now meet the medical imaging challenges, and the demands of our many different clinics," explained Dr. Stefan M. Niehues. "When we started with Vitrea™, the era of targeted examinations in clinical practice was on the rise. Using the software really enhanced our workflow and made it pretty easy to examine all the different parameters that we need to check. We are also able to perform high-quality CT of the heart, calcium scoring and other cardiovascular examinations. Evaluation has become much quicker, easier and routine to us."

Direct contact to experts in achieving optimal arrangement

Together with Canon Medical, the Charité focused on establishing the optimal arrangement of the system, not only for diagnostic scans, but also for interventional CT.

"One of the major strengths of working with Canon Medical that I see, is the direct contact to the service engineers and application specialists," said Dr. Niehues. "They have been assisting me from day one. I have been in several situations, in which I have required advice. Whenever I have tried to call them directly, they have answered or they called back from somewhere in the world, sometimes even during their vacation to help me. We continually improve our examination- and scanning protocols to enhance patient care."

One-click system

"Many post-processing items have become a one-click solution for us," he continued. "There are several things within our clinical routine that would not have been possible without the use of the new Vitrea™ software. We can access the images we obtain locally, as well as images from the different campuses from different systems, different vendors and different modalities. We can also post-process the images in a more sophisticated way and compare them, enabling us to make better diagnoses."

Advanced protocols

Alongside this, the Charité has been working on perfusion imaging, as well as subtraction imaging. Not only on the regular aspects, such as liver or kidney disease, but also on head- and neck cancer and interventional CT imaging. From this, the Charité has been able to publish protocols offering the lowest radiation dose for CT interventions worldwide.

Reliability

"The major changes we have achieved by using Canon Medical hardware and software are better images with lesser dose and compressed information," concluded Dr. Niehues. "To describe Canon Medical in a few words: reliable, responsible and dedicated to medical imaging."

The Charité opted for Vitrea's Advanced Visualization software, and initially purchased one single CT system from Canon Medical. It later bought three CT systems that were installed locally, and use altogether eight CT systems located on different campuses. Additionally, eight Canon ultrasound systems are used on a daily basis. //

Dr. Stefan M. Niehues.

"Because of the Vitrea software, many post-processing items have become a one-click solution."

Dr. Stefan M. Niehues and Dr. Chie-Hee Cho-Nöth.

Dr. Stefan M. Niehues, working with Vitrea on the PACS-workstation.