On the Go with *syngo*.via

Mobile platforms are transforming daily interactions in the home and workplace. Mobile access and multifunctional tools are being sought after at increasing rates by clinicians as they strive to separate from workstations. The advanced visualization software platform syngo.via provides the game-changing mobility that clinicians need – and now demand – for diagnostic imaging.

By Jeff Byers

At its basic level, *syngo*.via provides a robust system engineered to automate case preparation, guide and facilitate the diagnostic reading process and network modalities with IT by building on its strengths: a uniform user interface, a multimodality platform and advanced clinical applications.

syngo.via provides the necessary tools to read and share images from PET and CT, fluoroscopy and angiography, MR, digital x-ray and ultrasound. Routine tasks such as heart isolation are performed automatically, as well as the ability to automate vessel segmentation and labeling. Additionally, evaluations such as vessel lumen charting or plaque characterization can be overlaid on the images with just one click.

But *syngo*.via reaches the next level – building on client-server architecture. Seamless collaboration between technologists and physicians as well as integration with PACS workplaces also is valuable for case discussions in a tumor board, where cases can be accessed directly, and without additional preparation.

Cases Ready

Molecular imaging specialists are already reaping the time-savings benefits of the *syngo*.mCT Oncology Engine. Bringing PET and CT reading into a single application, the system allows for quantitative hybrid follow-up without leaving the application context. Michael Yu, MD, FRCPC, chief of nuclear medicine and PET at Fox Chase Cancer Center
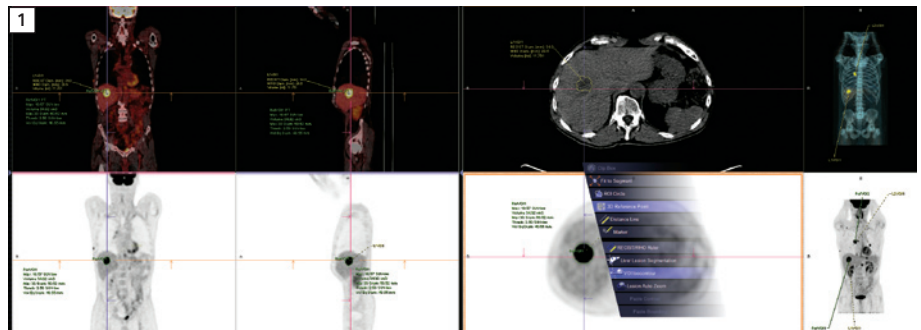
1 *syngo*.via combines advanced PET and CT segmentation and quantification for oncology in a single application

in Philadelphia, has beta tested the *syngo*.mCT Oncology Engine prior to its recent release.

A few months after installation, *syngo*.via is already redefining PET and CT reading, enabling Yu to focus on images and interpretation. The system automatically pre-fetches relevant prior studies, minimizing unwanted distractions such as mouse and eye movements that come from searching through menus.

"With a prior workstation, if I had an older study, I needed to transfer the previous patient studies from our PACS into my reading terminal, but that takes time," says Yu. "*syngo*.via will automatically pick the most-recent previous study of the same modality for comparison. This has saved me time where I don't have to search for and retrieve priors."

Needs Anticipated

Another standout feature, Yu says, is the one-click PET segmentation feature with 2D and 3D SUV-based iso-contouring

tools within *syngo*.mCT Oncology Engine. "The maximum SUV numbers and volumetric values add consistency to the image analysis and my diagnostic confidence. With the 3D display and triangulation, you're sure the lesion is in the right location," he says.

Departing from the workstation paradigm, *syngo*.via engages the user by automatically tracking and storing the user's findings and measurements in the Findings Navigator. Utilizing the customizable context menu and corner menus to easily access tools such as SUV quantification, Yu is able to accelerate his case navigation, reading and review. "All of the measurements you need are at your fingertips in the display.

"Over time, using mCT Oncology Engine, the reading as well as comparisons should get quicker, which should improve patient care," concludes Yu.

Jeff Byers is a medical and technology journalist with extensive writing experience in magazines, websites and newsletters for physicians and administrators.