Assessing treatment through quantification

Multi Modality Tumor Tracking on IntelliSpace Portal

How can radiologists quickly and efficiently obtain accurate tumor measurements – and communicate them to referring clinicians just as quickly and efficiently without disrupting their usual workflow? For Dr. Stephen Raskin, the answer is the Multi Modality Tumor Tracking (MMTT) application on Philips IntelliSpace Portal, a system for advanced visualization and analysis. Integrating images across several time points, modalities, and sites, this tool adds an extra degree of consistency to his work while boosting overall productivity.

The customer
Dr. Stephen Raskin, M. D.
Harvard Medical School
Internship: The Johns Hopkins Hospital, Maryland, USA
Residency: Brigham & Women’s Hospital, Massachusetts, USA
Research fellowship: The Royal Postgraduate Medical School, London, UK
Oncologic CT and PET radiologist, Department of Imaging at Sheba Medical Center, Israel

- 64 medical departments
- 75 laboratories
- 110 outpatient clinics
- 1,200 doctors
- 1,500 paramedic professionals
- 1,700 technicians and support staff
- 1,700 beds
- 2,300 nurses
- 6,700 healthcare professionals and scientists on campus
- 31,000 operations conducted annually
- 1.5 million patient visits annually

The challenge
Review and analyze multi-modality oncology datasets to detect and monitor tumors, and to quickly and efficiently communicate those findings to referring clinicians

The solution
Multi Modality Tumor Tracking application (MMTT) on Philips IntelliSpace Portal

MMTT, explains Dr. Raskin, “works the way I do and gives me the tools I need to do my job, which is, simply stated, find the lesion, measure it, and follow it.” This application provides efficient tools to monitor tumor progression or remission for oncology cases, allowing radiology and oncology staff to evaluate each individual’s response to therapy using sequential PET/CT, SPECT/CT, MR, and CT. Supported by MMTT as a fully configured workstation running on IntelliSpace Portal, Dr. Raskin and his colleagues can work quickly and with increased diagnostic confidence. What’s more, Philips is constantly evolving MMTT, to maintain its relevance in oncology.
Boosting diagnostic confidence

“Without even my feeling it,” reports Dr. Raskin, “MMTT imposes a consistency on my analysis… it lets me concentrate on being a radiologist, not a bean-counter.” Segmentation and graphical tracking help pinpoint regions of interest. The application also automatically tabulates lesions and their measurements based on RECIST/WHO criteria, and any customized calculations oncologists require. Data can easily be copied into reports as they’re being dictated and afterward exported automatically to PACS. MMTT does more than offer one unified view of the patient. “It makes communicating with the oncologist an efficient and straightforward process,” he emphasizes.

Workflows that save time

MMTT supports efficiency in a number of ways. Bookmarks, for example, allow users to start where they left off – especially helpful in the multiple follow-ups so common in oncology. Dr. Raskin calls up the program from inside PACS and starts work immediately, measuring tumors with consistent parameters at each time point. “While I’m focusing on the pathology,” he notes, “MMTT does the bookkeeping.” Thanks to bookmarks, his colleagues can show the referring oncologist Dr. Raskin’s exact procedures and analyses when the patient is discussed at Tumor Board – without investing hours of preparation.

Evolving as therapy evolves

“The time frame itself [for cancer] is expanding as new therapies come on line that – hopefully soon – will transform cancer into a chronic disease,” reflects Dr. Raskin. To keep pace with developments in radiology and oncology practices, Philips Healthcare continuously upgrades and enhances MMTT. “Reporting elements are upgraded all the time,” he comments. Updates in criteria-based results also help radiologists stay current.

Patients come first

Just three years ago, Dr. Raskin was using MMTT for specific “problem cases” – in which simple linear measurements were not sufficient or some lesions were growing while others were shrinking. Faced with the challenges of a busy practice, he says, “I now use it more and more – on well over half the scans I read.”

Dr. Raskin has never lost sight of what really matters: patients. “If I can give their oncologist the numbers he or she needs to help them win their personal battles,” he concludes, “then I’m convinced I’m practicing the best medicine I can. MMTT helps me do just that.”