

# LIFESAVING ADVANCES: VARIAN'S DYNAMIC ADAPTIVE RADIOTHERAPY

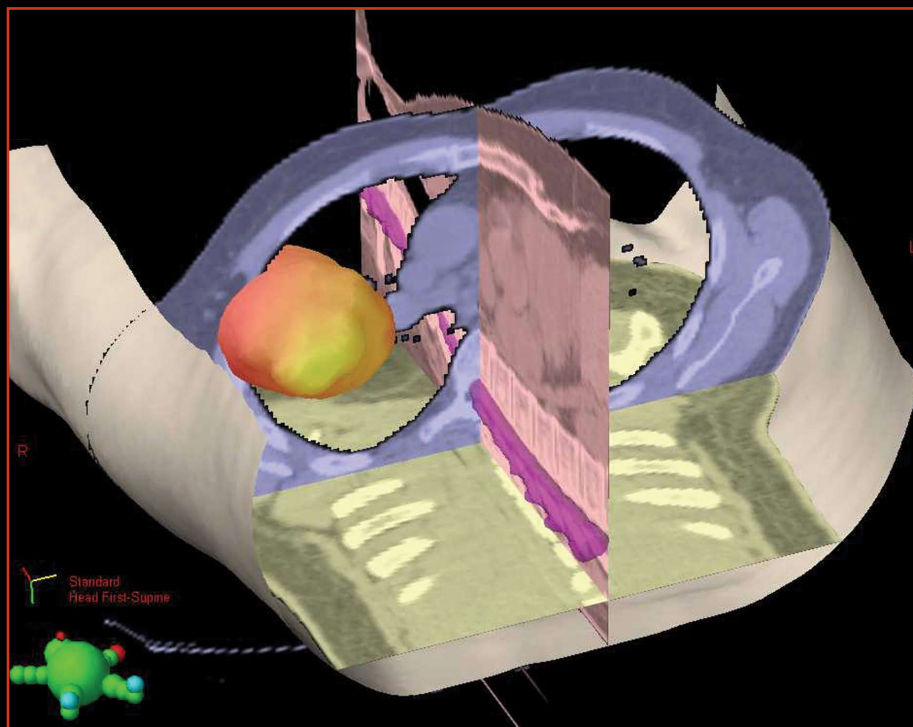
Dynamic Adaptive Radiotherapy™ (DART™) will take a giant step toward truly personalized cancer care by enabling clinicians to adapt treatments based on up-to-the-moment changes in a tumor or in the condition of a patient.

To achieve the dramatic results reported in this year's gallery of doctor and patient profiles, each treatment had to be as individual as the patient. By processing real-time image and motion-management data, Varian's Dynamic Adaptive Radiotherapy (DART) approach can help clinicians more quickly and effectively develop the best plan for treating each patient, accounting for the continuously changing shape, size, and position of a tumor both during a daily treatment session and throughout the prescribed course of treatment.

Working together with the versatile Trilogy™ or Clinac® medical linear accelerators, Varian's Inspiration™ environment will support the DART approach by providing a highly integrated and automated oncology treatment environment with immediate access to tightly synchronized imaging, planning, and treatment data. The DART

initiative will incorporate Varian's leading-edge technologies, including Real-Time Position Management (RPM™) respiratory gating, rapid inverse treatment planning with Eclipse™ software, and ARIA™ software for comprehensive data management.

By leading the way in the convergence of oncology treatments and information-management technology, Varian is also helping to simplify the decision-making process and to make complex treatment plans clinically practical for advanced treatments such as stereotactic radiosurgery or image-guided radiation therapy (IGRT) using cone-beam computed tomography (CT), radiographic, or fluoroscopic imaging. The clinical capabilities embodied in DART enable physicians to take a giant step toward the goal of delivering exactly the right dose, in the right place, at the right time—right now. ▣



**On Target.** Dynamic adaptation during treatment has the potential to improve the quality of care for lung cancer and other tumors that move as a patient breathes. This treatment plan for lung cancer shows a concentrated dose of radiation at the site of the targeted tumor (red).