Brainlab Introduces a New Concept for the Treatment of Multiple Brain Metastases

Automatic Brain Metastases Planning software will transform current treatment paradigms

Austin, Texas, July 18, 2014 – Brainlab, a global leader in medical technology, announced today the release of ELEMENTS Automatic Brain Metastases Planning*. The new software will simplify stereotactic radiosurgery planning for metastatic brain tumors and is the newest addition to the Elements A La Carte software portfolio, building upon an already robust radiotherapy / radiosurgery division. Brainlab will showcase the software at the 2014 American Association of Physicists in Medicine (AAPM) Annual Meeting and Exhibition, July 20-24 in Austin, Texas.

“When a patient develops more than one metastasis in the brain, one of the best treatment options available – radiosurgery – becomes impractical because the treatment time increases at the same rate as the number of metastases,” said Stefan Vilsmeier, President and CEO at Brainlab. “With our new technology, we are poised as a company to shift the treatment paradigm and provide more treatment options and a consistent way to deliver them.”

Brain metastases are the most common type of brain tumors and the numbers continue to rise due to improved diagnostics and control of the primary disease. Radiosurgery is a critical option for the treatment of these secondary cancers. No other new technology has had a greater impact on the management of metastatic brain cancer than stereotactic radiosurgery. Whole brain radiotherapy (WBRT) is still considered the standard of care, however, it has shown that WBRT can only prevent new tumors arising for a maximum of six months. There is clear recognition that not all patients with brain metastases have equivalently poor survival outcome, and a significant group lives for a longer period of time, prompting the debate regarding whether the patients in at least the best-prognosis category should be treated solely with more aggressive therapies upfront and keep WBRT as an option for later. Brainlab Automatic Brain Metastases Planning software brings to market technology that consistently and rapidly generates radiosurgery plans for the efficient treatment of multiple metastases.

“The Brainlab Automated Brain Metastases Planning software enables a ‘monitor-unit’, and time-efficient treatment planning and delivery, while reducing the dose to healthy brain tissue,” said Professor Niko Papanikolaou, PhD, Chief Medical Physicist, University of Texas Health Science Center, San Antonio, Texas. “This novel approach
to the treatment of metastatic brain tumors from Brainlab can potentially benefit several patients that are currently receiving whole brain radiation. We can now plan and treat metastatic brain cancer, for patients with larger volumes and higher number of metastases without the anticipated association of a decline in neurocognitive function.”

Brainlab Automatic Brain Metastases Planning automatically selects a group of metastases in such a way that the ‘multi-leaf collimator,’ or treatment beam shaper, fits to the shapes of these selected targets without leaving gaps. The algorithm generates an optimized ‘volumetric conformal’ radiosurgery plan in a matter of minutes after all metastases have been outlined and the clinical user can focus on reviewing and approving the plan in various innovative and comprehensive views. With this new treatment concept, the software creates an optimized dose distribution no matter if one or ten metastases are being treated.

To learn more, join Brainlab at its Novalis Circle Symposium, A Work of Arc, during the American Association of Physicists in Medicine in Austin, Texas on Sunday, July 20, 2014 at 6 PM.

About Brainlab

Brainlab, headquartered in Munich, develops, manufactures and markets software-driven medical technology, enabling access to, and consistency of, advanced less invasive patient treatment.

Core products revolve around information-guided surgery, precision radiation therapy, and information and knowledge sharing that fosters interdisciplinary collaboration. Brainlab technology currently powers treatments in the fields of neurosurgery, radiosurgery/radiotherapy, orthopedics, ENT, CMF, spine, and trauma.

Privately held since its formation in 1989, Brainlab has more than 5,000 systems installed in about 95 countries. Brainlab employs 1,150 people in 17 offices worldwide, including 290 research & development engineers, who form a crucial part of the product development team.

To learn more, visit www.brainlab.com.

* Work in progress – currently not for sale in the U.S.