A Comprehensive Solution for Non-Invasive Surgical Procedures Unveiled

/PRNewswire/ -- ASTRO Booth #5019 -- Varian Medical Systems (NYSE: VAR) today unveiled its next move against cancer, the new EDGE™ Radiosurgery Suite* -- a fully integrated dedicated system for performing advanced radiosurgery using new real-time tumor tracking technology and motion management capabilities.

"Our new EDGE radiosurgery suite represents the first really disruptive technology in radiosurgery in close to two decades, combining state-of-the-art linear accelerator technology with real-time tracking and patient positioning," said Kolleen Kennedy, president of Varian's Oncology Systems business. "We designed the EDGE to facilitate fast, accurate delivery of stereotactic radiosurgery to treat any condition amenable to this type of treatment, including tumors of the lung, prostate, brain, spine, and other indications throughout the body."

As a non-invasive option, radiosurgery utilization has been growing steadily over the last decade for the treatment of cancer and other conditions, and predictions are that it will continue to grow as research accrues about the benefits to patients. [1] Radiosurgery involves the use of sophisticated software and hardware to ablate tumors or other abnormalities with high doses of radiation while minimizing exposure of surrounding healthy tissue.

The EDGE radiosurgery suite combines Varian's world-class technologies in an end-to-end solution for planning and delivering radiosurgery treatments, encompassing:

- Real-time motion management tools, including the Calypso® system and an optical surface monitoring system for real-time tracking of tumor motion during treatment,
- Image guidance that encompasses two-, three-, and four-dimensional imaging (the latter showing motion over time) *,
- High Intensity Mode for fast dose delivery rates up to an industry-leading 2400 monitor units per minute,
- A new PerfectPitch™ treatment couch*, which will give clinicians more options for accessing and treating disease sites by making it possible to adjust the patient's position along six axes of motion versus four that were in earlier generations of technology,
- Varian's real-time system architecture, which enables an exquisite level of synchronization between imaging, patient positioning, motion management, beam shaping, and dose delivery technologies, performing accuracy checks every ten milliseconds,
- Multiple beam shaping options, including Varian's high-definition multileaf

collimator and radiosurgery conical collimators,
- Support for both frame-based and frameless approaches to patient immobilization,
- Eclipse™ treatment planning software, plus automated contouring tools and an anatomical atlas of templates for expediting the radiosurgery treatment planning process.

Clinicians at the Champalimaud Foundation in Lisbon, Portugal, were among the clinical experts assessing the Edge radiosurgery suite during its development phase. "We have been researching the viability of using single-fraction and hypofractionated radiosurgery to treat primary and oligo-metastatic lesions using earlier TrueBeam™ technology," says Dr. Carlo Greco, Professor of Radiation Oncology. "It is clear to us that the Edge platform, with its integrated tumor tracking features, will greatly facilitate these advanced, targeted treatments. It overcomes many of the limitations of other technologies, and will make it possible for image-guided radiosurgery to be more widely available to patients who can benefit."

"Varian's EDGE will offer clinicians a wide spectrum of capabilities in one smooth end-to-end workflow," Kennedy said. "With sub-millimeter accuracy, accelerated treatment speeds, and real-time tracking, we feel the EDGE is going to be the sharpest radiosurgery blade on the market."

Some of the technologies developed for the new EDGE system will also be made available as upgrades to Varian's current TrueBeam™, Trilogy®, and Clinac® iX treatment platforms.

* The EDGE radiosurgery suite is currently pending FDA 510(k) clearance and not available for sale.

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