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VCU MEDICAL CENTER COMBINES TECHNOLOGIES TO OFFER ONE OF THE WORLD'S MOST PRECISE TREATMENTS FOR CANCER AND OTHER TUMORS *Image-Guided Radiosurgery makes many inoperable tumors more operable*

Richmond, Va. (Jan. 10, 2006) — The Virginia Commonwealth University Medical Center now offers one of the most precise systems in the world to treat both cancerous and non-malignant tumors, making many operable that once were not.

By combining two state-of-the-art systems for advanced precision image-guided radiosurgery, the VCU Medical Center's new Trilogy Image-Guided Treatment Center is now ready to treat patients.

Stereotactic radiosurgery specialists from the VCU Massey Cancer Center's department of radiation oncology and VCU's Harold F. Young Neurosurgery Center are the first to combine two powerful systems: Trilogy™, a premier linear accelerator made by Varian, and ExacTrac®, an advanced X-ray positioning system made by BrainLAB.

Together these systems enable doctors to visualize and target tumors within 0.4 millimeters of accuracy. The treatment's accuracy may improve patient outcomes by enabling physicians to reach more tumors and treat them more effectively, including those located near blood vessels and other critical structures in the brain or spinal column. In addition, doctors can spare more healthy tissue around the tumors.

The non-invasive procedure is performed on an out-patient basis and provides a high degree of safety and comfort.

"Using the system's robotics and sophisticated image guidance, we can verify the tumor's exact position while on the treatment couch with unprecedented precision," said William Broaddus, M.D., Ph.D., the team's neurosurgery leader. "And the increased accuracy we have in brain radiosurgery also can be applied to the spine and other parts of the body."

Because the system allows for precise, high doses, the length of treatment can be considerably shorter than with conventional radiation.

"This stereotactic radiosurgery can be delivered in a single dose instead of over several weeks," said Ted Chung, M.D., Ph.D., of Massey's radiation oncology team. "Side effects are minimal, and patients can get on with their lives sooner," he added. "While many technologies offer three-dimensional image guidance, our combined system offers a fourth dimension – it accounts for a patient's breathing in real-time – so

we can target the radiation beam to a fraction of a millimeter,” added Stanley Benedict, Ph.D., associate professor and chief of clinical physics.

Unlike other “non-invasive” treatments, the Trilogy and ExacTrac systems do not require doctors to screw frames into patients’ heads to immobilize them.

Initially the group will treat brain and spinal cord tumors, and later this year will treat other tumors and lesions of the breast, prostate and lungs. The multi-specialty clinical team consists of neurosurgeons, radiation oncologists and dosing experts, physicists, therapists and nurses. The procedure is covered by most health insurance.

The new combined systems and treatment suite enhance the existing stereotactic radiosurgery program, which was developed by the two departments in 1991 and since has treated more than 400 patients.

The Patient Experience

- In most cases, image-guided radiosurgery treatments at the Trilogy Image-Guided Treatment Center take less than an hour.
- The clinical care team plans the treatment in advance by incorporating previous images such as MRIs, PET scans and CT scans to accurately identify the lesions, target treatments and evaluate adjacent body structures.
- On the day of treatment, patients undergo a final CT scan.
- On the treatment couch, patients are comfortably positioned by staff members. During the treatment, they are moved robotically while the staff in the control room monitor the patient by video and follow the data and images received from Trilogy and ExacTrac.
- Some patients may receive sedation or other medications to maximize their comfort.
- Combining the treatment planning, verification, delivery and recovery time, patients spend up to eight hours at the treatment center. They can then go home and resume normal activities.

For more information on the Trilogy™ Image-Guided Treatment Center, call 1-804-828-7232 or visit online at www.massey.vcu.edu/trilogy.

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Note to Editors: Photos and b-roll are available.

About the Virginia Commonwealth University Medical Center

The Virginia Commonwealth University Medical Center is one of the nation’s leading academic medical centers and stands alone as the only academic medical center in Central Virginia. The medical center includes the 780-bed MCV Hospitals and outpatient clinics, MCV Physicians -- a

600-physician-faculty group practice, and the health sciences schools of Virginia Commonwealth University. The VCU Medical Center, through its VCU Health System, offers state-of-the art care in more than 200 specialty areas, many of national and international note, including organ transplantation, head and spinal cord trauma, burn healing and cancer treatment. The VCU Medical Center is the site for the region's only Level 1 Trauma Center. As a leader in healthcare research, the VCU Medical Center offers patients the opportunity to choose to participate in programs that advance evolving treatment, such as those sponsored by the National Cancer Institute through VCU's Massey Cancer Center, Virginia's first NCI-designated cancer center. The VCU Medical Center's academic mission is supported by VCU's health sciences schools of medicine, allied health, dentistry, pharmacy and nursing.