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## New Technology Enables Shorter Radiation Treatment Time for Patients

Patients at UC San Diego Health in need of radiation therapy now have access to the next generation of radiation treatment technology. The new radiotherapy system significantly reduces treatment times with improved accuracy.

“This novel technology expands the radiation treatment capabilities of Moores Cancer Center,” said Arno J. Mundt, MD, professor and chair of the Department of Radiation Medicine and Applied Sciences at University of California San Diego School of Medicine. “This sophisticated technology has a high level of automation resulting in about 20 percent faster treatment times for patients.”



*Moores Cancer Center at UC San Diego Health.*

More rapid treatment also means less time spent under the radiation beam, which translates to less time for the possibility of patient motion or tumor “drift” during irradiation.

“Compared to conventional radiation treatment devices, this linear accelerator is a significant technologic step forward that simplifies operation and streamlines workflow,” said Todd Pawlicki, PhD, professor and vice-chair of medical physics at UC San Diego School of Medicine. “The goal is improved patient care and a more comfortable treatment experience.”

The system, called Halcyon™, is manufactured by Varian Medical Systems. UC San Diego Health is one of only two centers in the world currently treating patients with this advanced technology.

The radiotherapy system can deliver volumetric arc therapy or intensity-modulated radiation therapy in the same timeframe, which means oncologists can choose the best, quickest approach for each patient.

Accuracy is enhanced by a device called a “multileaf collimator,” which shapes the radiation beam to match the exact size, shape, and position of the tumor. It also reduces the amount of stray radiation that can reach surrounding healthy tissues.

The system operates quietly, with a couch that is low to the ground for easy patient access. The spacious circular bore that the patient passes into during treatment is larger than those on standard CT machines, with soft ambient lighting designed to contribute to patient comfort and relaxation.

Moore's Cancer Center is one of only 45 National Cancer Institute (NCI)-designated comprehensive cancer centers in the country. It is also the first and only San Diego-based member of the National Comprehensive Cancer Network, an alliance of the world's leading cancer centers, and is certified by the Quality Oncology Practice Initiative (QOPI), the leading quality program of the American Society of Clinical Oncology.

To learn more, visit [health.ucsd.edu/cancer](http://health.ucsd.edu/cancer)

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