

**NEW TOOL FOR INCREASED ACCURACY IN RADIATION
CANCER TREATMENT**

**St. Joseph Hospital's New Image Guided Radiation Therapy (IGRT) Combines
Tools to Maximize Radiation Effectiveness and Help Spare Normal Tissue**

ORANGE, Calif. (January 00, 2008) – Radiation physicians at St. Joseph Hospital in Orange have begun using Dynamic Targeting Image Guided Radiation Therapy (IGRT), a new combination of imaging tools that allow for increased accuracy and precision during the clinical radiation therapy process.

With Dynamic Targeting IGRT, neurosurgeons and radiation oncologists are able combine the use of its three imaging modes, radiographic, fluoroscopic and volumetric cone-beam CT, making it possible to identify the exact location of the tumor and map its movement. By providing a moving sequence of images that track the tumor's movement, IGRT allows oncologists to administer ultra precise and higher doses of radiation to previously unreachable tumors while sparing healthy surrounding tissue. With oncologists no longer having to compensate for tumor uncertainties and movement by enlarging the radiation beam, patients are able to maintain optimal organ function.

“The addition of image guidance of radiation therapy makes it possible for us to now visualize the target area immediately prior to the delivery of each treatment, so that we may not only account for any day to day internal variation of the cancer but also potentially modify the treatment based on tumor shrinkage,” said May-Lin Tao, M.D., radiation oncologist at St. Joseph Hospital. “This added ability allows us to better adapt

therapy on an ongoing, individual basis and potentially further increase our cure rate and reduce side effects.”

The images also allow doctors to determine the optimal window in a patient’s breathing cycle for delivering treatment, permitting the use of the Real Time Position Management (RPM) respiratory gating system which turns the treatment beam on and off, delivering radiation only during the specified time.

By providing improved accuracy and precision, Dynamic Targeting IGRT also nurtures the possibility of reducing the amount of daily treatment sessions needed for a total dose of radiation.

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