First Study of Its Kind Depicts Benefits of Brachytherapy for Patients with recurrent Prostate Cancer after EBRT

SAN DIEGO, CA — A recent midpoint follow-up of the NRG Oncology clinical trial RTOG 0526 determined that late treatment-related grade 3, 4, and 5 gastrointestinal (GI) and genitourinary (GU) adverse events were acceptably low for patients who received salvage brachytherapy for recurrent prostate cancer after prior external beam radiotherapy (EBRT). The results of the abstract “A Prospective Phase II Trial of Trans-perineal Ultrasound-guided Brachytherapy for Locally Recurrent Prostate Cancer after External Beam Radiotherapy” were presented at the American Society for Radiation Oncology (ASTRO) 59th Annual Meeting in San Diego, California, during the Clinical Trials Session on September 24, 2017.

NRG Oncology/RTOG 0526 is the first prospective multicenter trial to report outcomes of salvage low dose rate brachytherapy for post-EBRT local recurrence (LR). Ninety-two men were analyzed in this study. The primary endpoint was to examine treatment-related grade 3, 4, and 5 GI and GU adverse events that occurred 9 to 24 months following the brachytherapy.

“Of the patients that were examined, fourteen percent experienced late grade 3 gastrointestinal and genitourinary adverse events. There were no treatment-related grade 4 or 5 events reported. At this time, the only factor in this trial that is predictive of these late adverse events was the dosimetry of the implant, which highlights the need for careful planning and meticulous technique to limit the final delivered dose,” says Juanita M. Crook, MD. of the Department of Surgery at the University of British Columbia and the abstract’s lead author.

More complete coverage of the prostate with the prescription dose, predicted both occurrence of late adverse events (OR=1.22; 95% CI: 1.01-1.48; p=0.04) and time to occurrence (HR=1.18: 95% CI: 1.03-1.34; p=0.02).

“Further clinical outcomes of this study will be reported when the minimum five year follow-up is met; however, RTOG 0526 has helped our researchers understand that there is a needed focus on brachytherapy dose levels in order to reduce the side effects of this treatment,” stated Dr. Walter J. Curran, Jr., MD, NRG Oncology Group Chair and Executive Director of the Winship Cancer Institute of Emory University.

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Visit NRG Oncology and RTOG Foundation at Booth #3537.

Citation:
NRG Oncology conducts practice-changing, multi-institutional clinical and translational research to improve the lives of patients with cancer. Founded in 2012, NRG Oncology is a Pennsylvania-based nonprofit corporation that integrates the research of the NSABP Foundation, the Radiation Therapy Oncology Group (RTOG), and the Gynecologic Oncology Group (GOG). The research network seeks to carry out clinical trials with emphases on gender-specific malignancies, including gynecologic, breast, and prostate cancers, and on localized or locally advanced cancers of all types. NRG Oncology’s extensive research organization comprises multidisciplinary investigators, including medical oncologists, radiation oncologists, surgeons, physicists, pathologists, and statisticians, and encompasses more than 1,300 research sites located worldwide with predominance in the United States and Canada. NRG Oncology is supported primarily through grants from the National Cancer Institute (NCI) and is one of five research groups in the NCI’s National Clinical Trials Network.