Intensity Modulated Pelvic Radiation Therapy Reduces Patient Reported Toxicities

BOSTON, MA—NRG Oncology investigators report better patient-reported quality of life measures for women who received intensity modulated radiation therapy (IMRT) for their pelvic radiation therapy (RT) than those who received standard RT. NRG-RTOG 1203 was designed to assess if the IMRT, by reducing the amount of radiation received by the normal bowel and bladder structure, could decrease side effects for women receiving pelvic radiation. An analysis of NRG-RTOG 1203: A Phase III Randomized Trial Comparing Patient Reported Toxicity and Quality of Life (QOL) During Pelvic IMRT as Compared to Conventional RT, confirmed their hypothesis and the study was presented at the 2016 American Society for Radiation Oncology (ASTRO) Annual Meeting.

In this trial, 278 women requiring post-operative pelvic radiation were randomized to receive either IMRT or standard RT. Treatment with IMRT or standard RT was delivered once daily, 5 days a week for 5-6 weeks. To measure toxicity, patients completed questionnaires about bowel and bladder function and quality of life prior to and during treatment using the Expanded Prostate Cancer Index Composite (EPIC) scale, the FACT-Cx tool and the PRO-CTCAE measurement system.

After 5 weeks of radiation, patients who received IMRT had better bowel and bladder function scores than patients who received standard RT and required fewer anti-diarrheal medications. Quality of life measures showed less decline for patients treated with IMRT as compared to patients receiving standard RT. Continued follow-up is ongoing to determine if differences in acute toxicity result in lower rates of long-term toxicity.

“This trial has challenged the current practice for the treatment of women with endometrial and cervical cancers,” says Walter J. Curran Jr., MD, an NRG Oncology Group Chair and Executive Director of the Winship Cancer Institute of Emory University. “Congratulations to the entire study team and NRG Oncology for continuing to improve the standard of care and quality of life for these patients.”

NRG-RTOG 1203 was funded by grants from the National Cancer Institute.

Full Citation
NRG RTOG-1203: A Phase III Randomized Trial Comparing Patient Reported Toxicity and Quality of Life (QOL) During Pelvic IMRT as Compared to Conventional RT
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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 National Adjuvant Breast and Bowel Project, the Radiation Therapy Oncology Group, and the Gynecologic Oncology Group. The research organization 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 1300 research sites located world-wide 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.