NRG RTOG 0617 Shows Survival Correlation for Low versus High Enrolling Institutions for Patients with LA-NSCLC

Philadelphia, PA—Lung cancer is the leading cause of cancer-related death in the United States and it is estimated to have contributed to 221,200 new cases and 158,040 deaths in 2015 alone. A secondary analysis of NRG Oncology’s clinical trial RTOG 0617, published in the Journal of the National Cancer Institute, was initiated in an effort to evaluate the effect of institution accrual volume on clinical outcomes among patients receiving chemoradiation for locally advanced non-small cell lung cancer (LA-NSCLC). The study showed that patients treated at institutions with higher trial accrual volume on a phase III trial had statistically significant longer overall survival compared with patients treated at low-volume centers.

“The overall survival difference between patients treated at high-volume centers versus low-volume centers was greater than 10% at two years, which is a substantial finding for LA-NSCLC,” says the study’s lead author, Bree Eaton, MD of the Winship Cancer Institute of Emory University in Atlanta. “It is suspected that the effect on overall survival may be a reflection of both improved disease control and better management or prevention of adverse effects.”

Four hundred and ninety-five eligible patients were randomly assigned and treated at 180 different institutions. The range of accrual for low-volume centers (LVCs) was one to three patients, whereas high-volume centers (HVCs) were four to 18 patients. RT was administered according to protocol specifications for target volume definition and treatment delivery. Kaplan-Meier (KM) estimates of overall survival at two years were 55.5 percent for the HVC cohort compared with 43.9 percent for the LVC cohort. HVC remained significantly associated with a lower risk of death.

“These results provide further clarification on the differences in outcomes between higher and lower accruing sites and it also shapes the way the radiation oncology community approaches the treatment of LA-NSCLC,” says Walter J. Curran, Jr., MD, an NRG Oncology Group Chair and Executive Director of the Winship Cancer Institute of Emory University.

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