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For some lung cancer patients, surgery may yield better long-term results

(September 17, 2014, San Francisco) – Patients with early stage non-small cell lung cancer (NSCLC) who are otherwise healthy fare better over time if they undergo conventional surgery versus less-invasive radiosurgery to remove their cancer, according to a Yale study. The findings are scheduled to be presented at the 56th annual conference of the American Society for Radiation Oncology in San Francisco. (Abstract # 302; Comparative Effectiveness of Stereotactic Body Radiotherapy versus Surgery for Stage I Non-Small-Cell Lung Cancer.)

The study used Medicare billing records of 1,078 lung cancer patients age 67 and older from across the United States to assess shorter- and longer-term complications and outcomes related to surgery versus radiosurgery (also known as stereotactic body radiotherapy, or SBRT). The patients were treated in academic and private practice settings of all sizes.

While the findings generally support current practices of treating healthier NSCLC patients with surgery rather than radiosurgery, researchers were surprised by how much better surgical patients fared long-term, said the study’s first author, James B. Yu, M.D., assistant professor of therapeutic radiology at Yale School of Medicine and a member of Yale Cancer Center.

“What was dramatic to me was the relatively high rate of complications and death among surgical patients in the first three months compared with how much better they did than radiosurgery patients after 12 months, “ Yu said. “While surgery may be associated with infections and complications in the short-term, it appears that patients healthy enough to undergo surgery live longer.”

Yu said researchers were unable to account for unknown factors that may have affected outcomes, such as whether patients who underwent surgery had more accurate assessment of the disease’s spread than those who did not; and determining definitively that surgical patients were healthier than radiosurgery patients at the time of procedure.

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Other authors on the study included Pamela R. Soulos; Laura D. Cramer; Roy H. Decker, M.D.; Anthony W. Kim, M.D.; and Cary P. Gross, M.D.. All are members of Yale’s Cancer Outcomes, Public Policy, and Effectiveness (COPPER) Center.

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a vital role in the advancement of the NCI’s goal of reducing morbidity and mortality from cancer through scientific research, cancer prevention, and innovative cancer treatment.

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