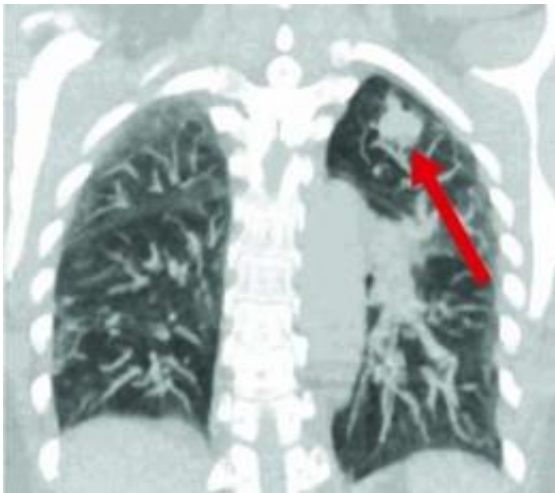


# Early-stage lung cancer treatments evaluated in patients with breathing problems

April 10 2012, By Caroline Arbanas

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A CT image shows an early-stage lung tumor. A new clinical trial will evaluate whether a limited surgical procedure or a specialized type of radiation therapy is the best treatment for patients with early-stage lung cancer who also have breathing problems. Credit: JEFFREY BRADLEY, MD

(Medical Xpress) -- The Alvin J. Siteman Cancer Center at Barnes-Jewish Hospital and Washington University School of Medicine is seeking patients for a clinical study to determine the best treatment for patients with early-stage lung cancer who also have breathing problems.

Many patients with early-stage lung cancer have emphysema, pulmonary hypertension or other [breathing problems](#) that limit their [treatment](#) options.

The study focuses on patients with the most common type of lung cancer, non-small cell lung cancer. When it is diagnosed early, the standard treatment is [surgery](#). But the operation is especially risky for patients with poor lung function, who often have complications after surgery.

In the new trial, doctors will compare a type of radiation therapy, called stereotactic body radiation therapy, to a more limited surgical procedure. Rather than remove the entire section of the lung, surgeons will remove only a small portion, which may reduce complications after surgery.

Stereotactic body radiation therapy pinpoints high doses of radiation directly to the tumor, while reducing damage to surrounding tissues. It can also be delivered in just several treatments over seven to 10 days, compared to conventional radiation, where treatment is given over six to eight weeks.

Stereotactic body radiation therapy is the treatment of choice for patients with non-small cell lung cancer who are too frail for any surgery. But doctors don't know whether it is better than the limited surgery for patients healthy enough for surgery but who have decreased lung function.

“Our hope is that doctors and patients will embrace this cutting-edge trial so we can clarify the optimal treatment for this group of higher-risk patients,” says study co-investigator Bryan F. Meyers, MD, chief of the Section of Thoracic Surgery. “For very frail patients, we have stereotactic body radiation therapy. For fit patients, surgery still dominates. This trial looks at people on the cusp for whom we don't have certainty.”

Nationwide, an estimated 420 patients will be enrolled in the trial, which is sponsored by the National Cancer Institute. Traves Crabtree, MD,

assistant professor of surgery, is the local principal investigator of the study.

To be eligible, patients must have an early-stage (1A or selected 1B) non-small cell lung tumor and not received other cancer treatments.

Siteman Cancer Center was involved in an earlier trial of stereotactic body radiation therapy for early-stage non-small cell lung cancer in patients too frail for surgery.

“We have one of the largest U.S. experiences with stereotactic body radiation therapy for lung cancer,” says study co-investigator Jeffrey Bradley, MD, professor of radiation oncology. “It can eradicate lung tumors in 90-95 percent of patients with early-stage cancer, double that of conventional radiation therapy. And stereotactic [body radiation](#) therapy also appears to double the survival rate in these patients, compared to conventional radiation therapy. It’s definitely a major advance in [lung cancer](#) treatment.”

Patients in the study will be randomly assigned to receive either three treatments of stereotactic body [radiation therapy](#) over seven to 10 days or the limited surgical procedure. Over the next five years, doctors will evaluate [patients](#)’ survival rates and their quality of life after treatment.

**More information:** For more information about the study, call clinical nurse research coordinator, Jo Musick at (314) 747-0707.

Provided by Washington University in St. Louis

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