

A Study Comparing the Removal of an Entire Lobe of the Lung (Lobectomy) versus the Removal of a Smaller Portion of the Lobe of the Lung (Sublobar Resection) For Small (< 2 cm) Peripheral Non-Small Cell Lung Cancer Tumors

INCLUSION CRITERIA:

- 1) Patient must have a peripheral lung tumor on the pre-operative CT or PET-CT scan obtained within 42 days and presumed to be lung cancer. The tumor must be peripheral, that is, located in the outer third of the lung either the transverse, coronal or sagittal plane.
- 2) Patient whose tumor location is suitable for either a lobectomy or sublobar resection.
- 3) Patient with ECOG performance status of 0-2.
- 4) Patient with age = or > 18 years
- 5) Patient who can provide informed consent for this research.

Intraoperative randomization eligibility criteria:

- 1) Histologic confirmation of non-small cell lung cancer (if not already obtained)
- 2) Confirmation of N0 status (that is, no cancer cells are found in the lymph nodes) by frozen section examination of lymph nodes from levels 4, 7 and 10 if resection on the right side of the lung, or level 5 OR 6, 7 and 10 on the left side. Lymph nodes may be sampled during the resection or previously via a mediastinoscopy within 6 weeks of this definitive surgery.

EXCLUSION CRITERIA:

- 1) Patient whose tumor appear on the CT scan as pure ground glass opacities or pathologically confirmed N1 or N2 disease are not eligible.
- 4) Patient who had prior malignancy within 5 years other than non-melanoma skin cancer, superficial bladder cancer or CIS of the cervix.
- 5) Patient who has received prior chemotherapy or radiation therapy for this malignancy.
- 6) Patient with locally advanced or metastatic disease.
- 7) Pregnant women and fetuses