

77P The prognostic impact of the international association for the study of lung cancer (IASLC) definitions on completeness of surgical resection for non-small cell lung cancer (NSCLC)

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Background: To reappraise the prognostic significance of the IASLC definitions of complete, uncertain, and incomplete resection in NSCLC surgery.

Methods: Single-institution retrospective review of 1052 consecutive patients surgically treated for NSCLC between 2008 and 2017. Complete resection was defined by absence of residual disease; systematic nodal dissection; no extracapsular extension in lymph nodes removed separately or those at lung specimen margin; negativity of distal mediastinal lymph nodes. An uncertain resection was defined by free resection margins, but one of the following applied: inadequate lymph node assessment; positivity of distal mediastinal lymph nodes; presence of carcinoma in situ at bronchial margin; positive pleural lavage cytology. A resection was defined incomplete by presence of residual disease; extracapsular extension in distal mediastinal lymph nodes or those at lung specimen margin; positive cytology of pleural or pericardial effusions. Follow-up was complete and overall survival (OS) was assessed using the Kaplan-Meier method and Cox proportional hazard modeling.

Results: Eight hundred eighty-six (84.2%) patients had a complete resection, 131 (12.5%) an uncertain resection, and 35 (3.3%) an incomplete resection. Median follow-up was 44.9 months (range, 0.1 to 132.3). Complete resection was associated with significantly better survival compared to uncertain and incomplete resection (adjusted hazard ratio, 1.84 and 2.31, respectively; both $p = 0.0001$). Median OS and 5-year survival rate were 102.3, 32.9, 23.3 months and 62.3%, 33.5%, 24.3% in patients undergoing complete, uncertain, and incomplete resection, respectively. Additional significant predictors for OS in the multivariable Cox model were patient age and Charlson Comorbidity Index; tumor diameter, histology and pathologic TNM stage; and the occurrence of postoperative adverse events.

Conclusions: Our current experience confirms that in NSCLC surgery, significant differences exist in long-term survival following complete, uncertain, and incomplete resection, as defined by the IASLC.

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