

# Lymph Node Sampling by Lung Cancer Surgical Resection Type: Exploring Trends **Preceding Commission on Cancer Standard 5.8**

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#### BACKGROUND

- •High-quality lymph node evaluation is critical to the surgical management of early-stage non-small cell lung cancer (NSCLC)
- •However, the completeness of lymph node evaluation has significantly varied To reduce this variability, Commission on Cancer (CoC) Standard 5.8 requires
- sampling from  $\geq 3$  distinct mediastinal lymph node stations and 1 hilar station ("3+1") for all curative-intent lung cancer surgeries

≥10 lymph nodes

CoC Standard 5.8 marks a shift from guidelines recommending a count-based lymph node sampling strategy to a station-based strategy

# AIM

To determine associations between lymph node sampling strategies (≥10 lymph) nodes and 3+1 nodal stations) and cancer outcomes by surgical resection type

# METHODS

Using cancer registry and electronic health records, we identified and characterized patients with early-stage NSCLC who underwent surgery (2009-2019) in an integrated health care system



Characterized lymph node sampling strategy ( $\geq$  10 nodes or 3+1 stations)





Identified associations with 1-year NSCLC recurrence & 5-year mortality



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### RESULTS

<b>Lobectomy</b> (n=2,096, 84%)		<b>Sublobar</b> (n=386, 16%)	
36%	P <(	0.001	14%
43%	P <0	.001	23%

<u>Lobectomy</u> patients had reduced 5-year mortality with ≥10 lymph

Sublobar patients had reduced 1-year NSCLC recurrence with 3+1 station-based lymph node sampling (HR 0.63, 95% CI 0.41-0.97)

### CONCLUSIONS

Consistent with prior studies and evidence supporting the implementation of CoC Standard 5.8, increased lymph node sampling is associated with improved outcomes

Our finding of lower 1-year recurrence rates with 3+1 station-based sampling in sublobar

Further research is needed to evaluate the impact of CoC Standard 5.8 across various





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