



Poster : EP05.13 Clinical vs Pathological Nodal Staging in NSCLC: A 1038-Patient Analysis

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INTRODUCTION

Accurate mediastinal staging is essential for defining optimal treatment strategies in non-small cell lung cancer (NSCLC). Despite advances in imaging modalities such as computed tomography and positron emission tomography combined with CT, discrepancies between clinical nodal staging and pathological nodal staging remain frequent.

This study aimed to evaluate the accuracy of clinical nodal staging in a large surgical cohort.

METHODS

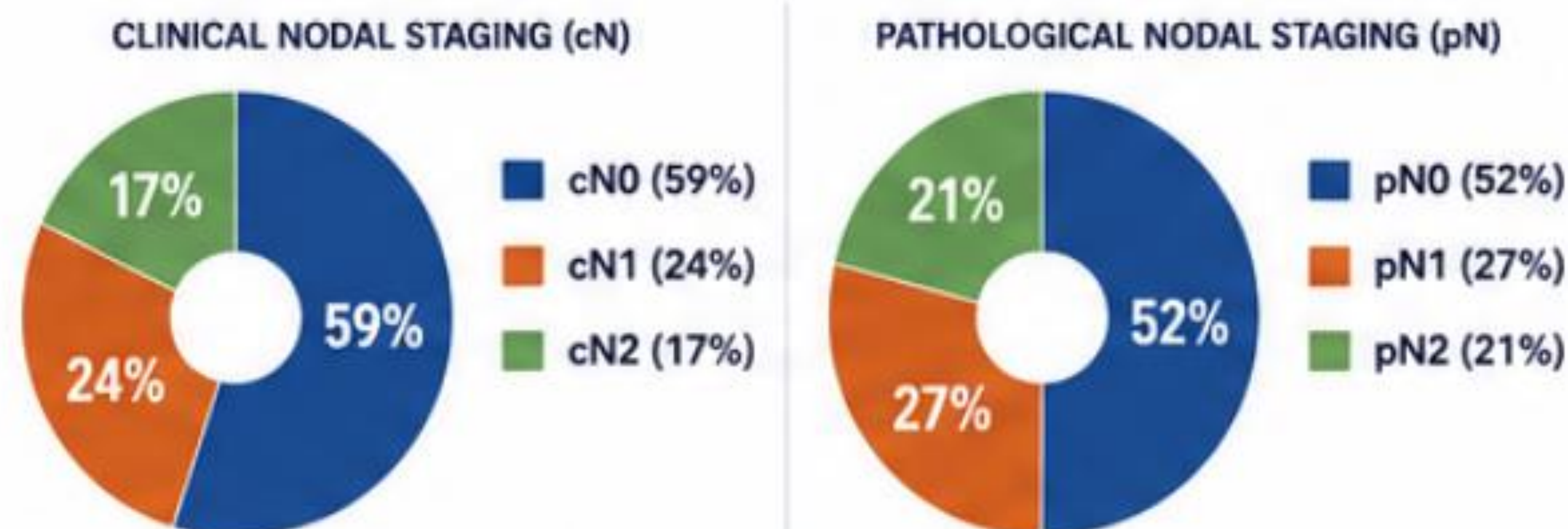
- Retrospective study including 1,038 patients who underwent surgical resection for NSCLC with systematic lymph node dissection.
- Preoperative clinical staging was based on CT imaging and PET-CT when available, as PET-CT was not systematically performed in all patients.
- Concordance between clinical (cN) and pathological (pN) staging was assessed using final histopathological results.
- The mean interval between imaging and surgery was **5 weeks**.
- Neoadjuvant chemotherapy was administered in **145 patients (14%)**.
- Systematic lymph node dissection was performed in association with the pulmonary resection in all cases.

RESULTS

PATIENTS' CHARACTERISTICS

	Number of patients	1,038
	Mean age (years)	62.4
	Sex ratio (M/F)	1.8
	Predominant histology: Adenocarcinoma	68%
	Mean interval imaging-surgery	5 weeks
	Neoadjuvant chemotherapy	145 patients (14%)

CLINICAL AND PATHOLOGICAL NODAL STAGING



CONCORDANCE BETWEEN cN AND pN STAGING



A statistically significant discrepancy was observed between clinical and pathological nodal staging ($p < 0.001$ for all comparisons).

KEY FINDINGS

- ✓ Preoperative staging classified patients as cN0 in 59%, cN1 in 24%, and cN2 in 17%.
- ✓ Postoperative pathological staging revealed pN0 in 52%, pN1 in 27%, and pN2 in 21%.
- ✓ Overall concordance between clinical and pathological nodal staging was 64%.
- ✓ **Nodal upstaging was particularly pronounced in cN0 patients, with 22% being reclassified as pN1 or pN2 after pathological analysis.**

CONCLUSIONS

The most accurate nodal classification remains postoperative pathological staging, which provides a more precise assessment than clinical staging. These findings highlight the limitations of preoperative imaging for nodal evaluation and reinforce the essential role of complete systematic lymph node dissection for accurate staging and optimal therapeutic decision-making in NSCLC.

