

EP07.03: ONCOLOGIC OUTCOMES AFTER NEOADJUVANT CHEMO-IMMUNOTHERAPY FOR NSCLC: A REAL-WORLD MULTICENTER STUDY

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INTRODUCTION

Neoadjuvant chemo-immunotherapy has significantly improved pathological responses and survival in patients with non-small cell lung cancer (NSCLC) compared to chemotherapy alone. It has been increasingly used in multidisciplinary treatment strategies, where surgery still holds a major role. We aim to present survival and oncological outcomes from a real-world multicenter study.

METHODS

Design

Multicenter retrospective study involving 11 referral centers (preliminary results).

Population (2016-2025)

- Clinical stage II-III NSCLC (8th edition)
- Neoadjuvant chemo-immunotherapy or immunotherapy
- Surgery with radical intent

Primary outcome

Primary outcome was progression-free survival (PFS).

Statistical analysis

Logistic regression was used to identify predictors of recurrence.

194 patients • 11 centers • 2016-2025
Median follow-up duration = 15.7 months

Not evidence of Disease
77.5%

Alive with Disease
14.1%

Died of Disease
5.8%

DISCUSSION AND CONCLUSION

TAKE AWAY MESSAGE

- Primary Prognostic Drivers:** Pathological tumor response and nodal status are the main determinants of oncologic outcomes following neoadjuvant chemo-immunotherapy.
- Oncologic Equivalence of MIS:** Minimally invasive surgery (MIS) does not compromise progression-free survival (PFS), confirming its oncologic safety and feasibility in post-immunotherapy surgical settings.

FUTURE DIRECTION FOR RESEARCH

- Non-Invasive Response Prediction:** Evaluate preoperative biomarkers (e.g., ctDNA dynamics or radiomics) to accurately predict pathological response and nodal downstaging before surgery.
- Long-Term & Subgroup Validation:** Conduct multi-center prospective studies to assess long-term progression free survival (PFS) across distinct pathological response.

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Additional Tables

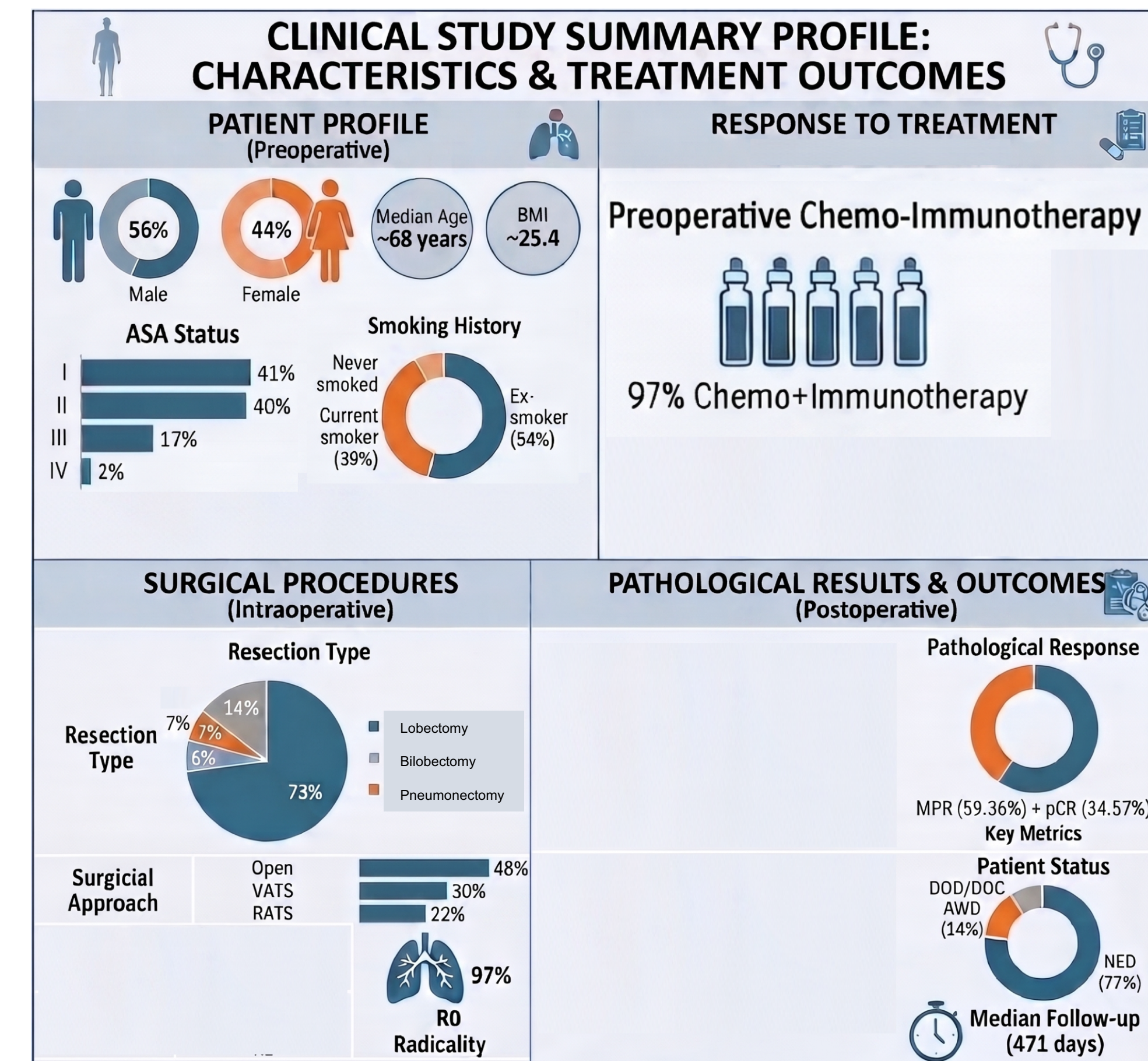
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Artificial Intelligence (AI) Use Disclaimer

An AI assistant (ChatGPT) was used to support language editing of this poster, Gemini was used to create images. All data, analyses, figures and scientific content were produced and verified by the Authors.

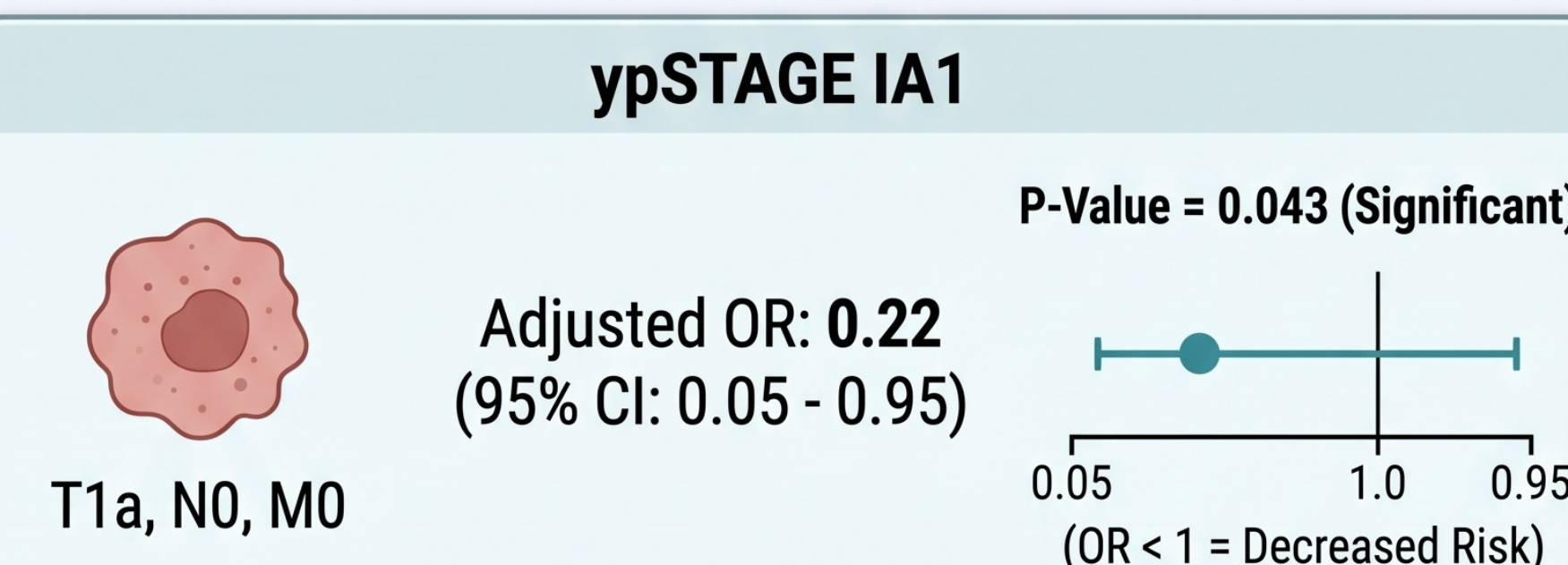
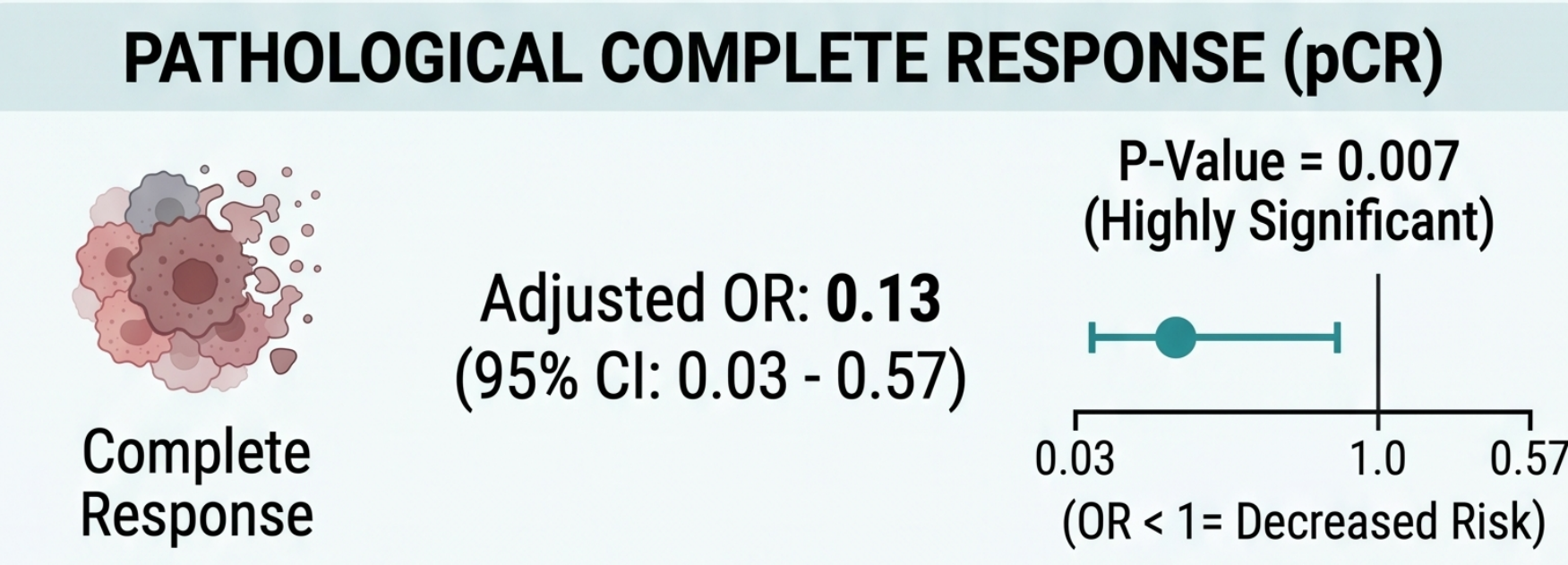
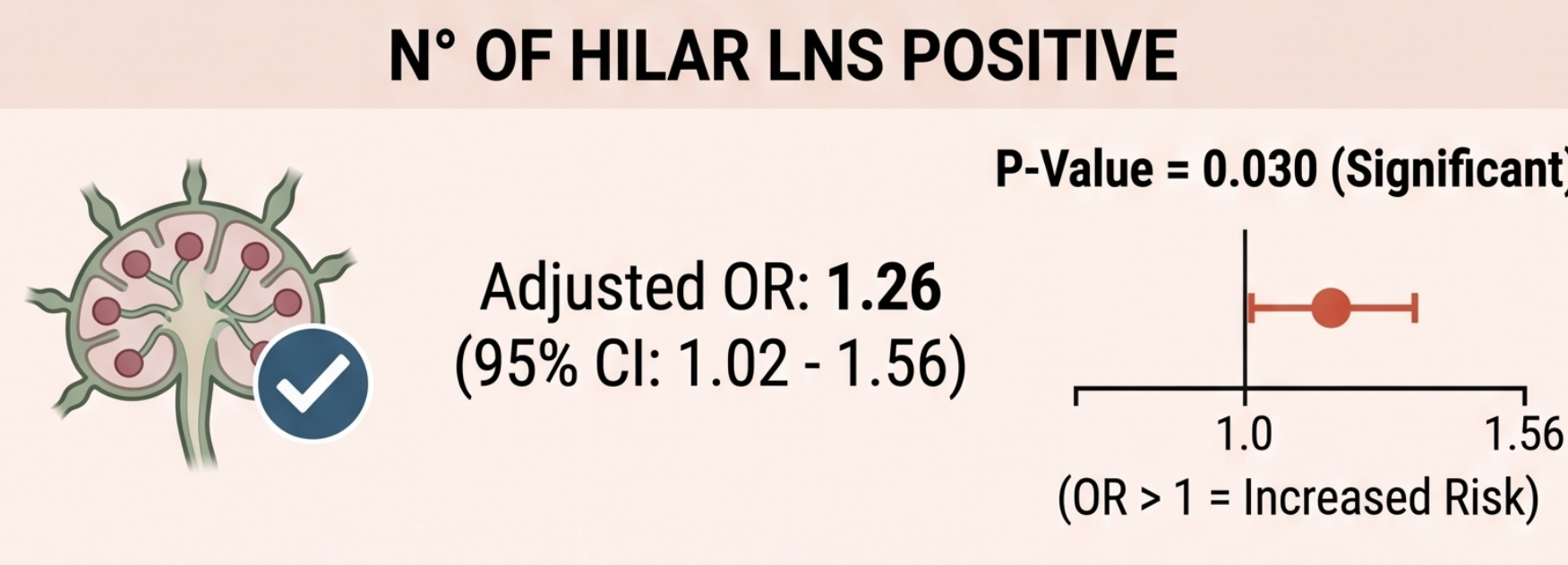
RESULTS

A total of 194 cases were included. Median age was 68 and 56% were males. Most patients had clinical stage III NSCLC (88.7%) and received neoadjuvant chemo-immunotherapy. Median PD-L1 was 10% and immunotherapy-related complications were 39.6%. Most patients achieved a RECIST1.1 partial response (76.8%) or stable disease (15.5%). The open approach (47.9%) and lobectomy (73.2%) were the most frequent at surgery. R0 resection rate was 96.9% and radical lymphadenectomy was performed in 94.3% of patients. Pleural adhesions (41.2%) and hilar fibrosis (58.8%) were common. pCR and MPR were 34.6% and 59.4%. Median follow-up duration was 15.7 months. Most patients were free from disease (77.5%), while 14.1% were alive with disease and 5.8% died of disease. Among these, local recurrence rate was 40.5%. At multivariate analysis, pCR (aOR 0.13, 95%CI 0.03-0.57, p=0.007) and ypStageIA1 (aOR 0.22, 95%CI 0.05-0.95, p=0.043) were independent predictors of PFS, while the number of positive hilar lymph nodes (aOR 1.26, 95%CI 1.02-1.56, p=0.030) was a risk factor. Minimally invasive approaches were not predictors of differences in PFS compared to thoracotomy.



MULTIVARIATE ANALYSIS: SIGNIFICANT PROGNOSTIC VARIABLES

Adjusted Odds Ratio (OR) with 95% Confidence Interval (CI) and P-Value



Adjusted for potential confounders and other significant univariate variables.

Increased Risk (OR > 1)
Decreased Risk (OR < 1)

