

Impact of Immunotherapy Combined with Chemotherapy in Advanced Non-Small Cell Lung Cancer: A Multicenter Retrospective Study

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Abstract

Background: Immune checkpoint inhibitors have transformed NSCLC treatment. Methods: Retrospective multicenter study of 312 patients. Results: Combination therapy improved progression-free and overall survival with acceptable toxicity. Conclusions: Combination therapy demonstrated significant clinical benefit.

Keywords

Medical oncology; NSCLC; Immunotherapy; Pembrolizumab; Chemotherapy.

Introduction

Lung cancer remains the leading cause of cancer-related mortality worldwide. Immune checkpoint inhibitors have changed the treatment paradigm for advanced NSCLC.

Materials and Methods

Retrospective multicenter cohort including adults with stage IV NSCLC treated between 2022 and 2025. Kaplan–Meier survival analysis and Cox regression were used.

Results

Median progression-free survival was 10.8 vs 6.4 months. Overall survival was 22.6 vs 15.2 months. Response rate improved to 54.3%.

Discussion

Findings are consistent with landmark phase III trials demonstrating the benefit of PD-1 inhibition combined with chemotherapy.

Conclusion

Combined immunotherapy and chemotherapy should remain a standard first-line option for eligible patients with advanced NSCLC.

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