



TALENT Study: Autologous Tumor-Infiltrating Lymphocytes Combined with Tislelizumab in Resected Stage II–IIIB (N2) NSCLC Patients with Incomplete Pathological Response After Neoadjuvant Immunochemotherapy

Liang Liu¹, Xiubao Ren¹, Yanjuan Xiong¹, Dongsheng Yue²

1. Department of Immunology and Biotherapy 2. Department of Lung Cancer Tianjin Medical University Cancer Institute and Hospital, Tianjin, CHINA.



IASLC 2026 World
Conference on Lung Cancer

SEPTEMBER 12 – 15, 2026
SEOUL, REPUBLIC OF KOREA

P2.304-390

INTRODUCTION

- Perioperative immunotherapy significantly improves EFS and OS in resectable stage II–III NSCLC.
- Non-pCR patients remain at high risk of recurrence, with ~50% 3-year EFS, highlighting a significant unmet need.
- Tumor-infiltrating lymphocytes (TILs) are tumor-reactive autologous T cells with high specificity and multi-antigen recognition, and have shown clinical efficacy in solid tumors.
- The study aims to incorporate TIL therapy into the adjuvant treatment setting to improve disease-free survival (DFS) outcomes in patients.

Study Design

Key Eligibility Criteria:

1. Age 18–75 years
2. Stage II–IIIB, driver mutation–negative NSCLC
3. Received neoadjuvant immunotherapy plus chemotherapy and subsequently underwent R0 resection
4. ECOG PS 0–1
5. Non-pCR status following neoadjuvant treatment

N=41

Treatment Regimen:

- Tislelizumab 400 mg Q6W × 8 cycles
- Autologous peripheral blood-derived TIL therapy, $\geq 5 \times 10^{10}$ cells per infusion, administered 4 times.

Primary endpoint: 2-year Disease-Free Survival (2-year DFS) rate

Secondary endpoints: Overall Survival (OS); locoregional relapse-free survival (LRFS), Distant metastasis-free survival (DMFS), Lung Cancer Specific Survival (LCSS), adverse events (AE)

METHODS

Primary Endpoint

- 2-year Disease Free Survival: defined as the proportion of patients who remain free of disease recurrence, second primary malignancy, or death from any cause at 24 months after surgery.

Secondary Endpoints

- Overall survival (OS): defined as the time from the start of study treatment to death from any cause.
- Lung Cancer-Specific Survival (LCSS): calculated from the date of surgery to the date of death due to lung cancer; deaths from other causes were censored at the time of death.

Clinical trial information:

NCT07330037



Key Inclusion Criteria

- Histologically or cytologically confirmed NSCLC with resectable stage II–IIIB (N2) AJCC V9;
- No prior anti-tumor treatment;
- Negative for EGFR/ALK/ROS1 mutations;
- ECOG PS 0–1;
- Undergone 2–4 cycles of neoadjuvant therapy combining immunotherapy and chemotherapy, followed by surgical resection with R0 margins but without achieving a complete pathological response (non-pCR);

Key Exclusion Criteria

- Vaccination within 28 days prior to the first dose, except for inactivated vaccines;
- History of other malignancies within 5 years prior to screening;
- Active infections requiring systemic anti-infective treatment;
- Active gastrointestinal bleeding or contraindications to IL-2 use;

Treatment

- Biological: L-TIL cells injection: Autologous peripheral blood TILs will be infused 4 times, each at a dose of $\geq 1 \times 10^9$ cells, administered 2–3 days after each tislelizumab infusion.
- Drug: Tislelizumab
Tislelizumab will be given at 400 mg every 6 weeks for a total of 8 cycles of adjuvant treatment.