

Caris Abstracts and Presentation Schedule

WCLC 2026

MINI ORALS

Session: MO05 – Evolving Pathological Grading and Molecular Profiling for Lung Cancer Risk Stratification and Treatment

Monday, September 14, 2026 / 12:58 PM – 1:03 PM KST / Room 102, Grand Ballroom, 1F

MO05.09: Impact of Protein Arginine Methyltransferase 5 (PRMT5) Expression and MTAP Deletion on OS and Immune Cells in NSCLC

R. Hsu, S. Deshmukh, S. Wu, et al.

- Among 39,124 NSCLC samples, MTAP-deleted tumors had higher PRMT5 expression, with PRMT5-high/MTAP-deleted tumors showing the shortest overall survival across molecular subtypes.
- In immune checkpoint inhibitor (ICI)-treated patients, PRMT5-high/MTAP-deleted tumors had shorter overall survival than PRMT5-high/MTAP-non-deleted tumors.
- PRMT5-high/MTAP-deleted tumors had fewer CD8+ T cells and other adaptive immune cells, indicating a less favorable immune microenvironment.

Session: MO13 – Global Challenges and Solutions in Lung Cancer Management

Tuesday, September 15, 2026 / 11:58 AM – 12:03 PM KST / Room 105, Grand Ballroom, 1F

MO13.09: Prevalence of Immunotherapy (IO) Biomarkers, Tumor Microenvironment (TME) Composition and Survival by Race/Ethnicity in NSCLC

R. Hsu, N. Gandhi, K. Chennapan, et al.

- Across 43,261 NSCLC samples, race/ethnicity was associated with differences in genomic profiles, tumor immune microenvironment, and clinical outcomes.
 - Non-Hispanic Asian Pacific Islander patients had longer overall survival and fewer immunotherapy-resistance genomic alterations than non-Hispanic White patients.
 - Among ICI-treated patients, non-Hispanic Black patients had longer survival, despite a higher prevalence of immunotherapy-resistance alterations.
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POSTER TOUR

Session: PT2.05 – Mesothelioma, Thymoma, and Other Thoracic Tumors

Monday, September 14, 2026 / 2:01 PM – 2:09 PM KST / ePoster Lounge Station 5

PT2.05.03: Transcriptomic Subtypes Predict Frontline Therapy Response in Pleural (MPM) and Peritoneal Mesothelioma (MPeM)

A.H. Nassar, N. Gandhi, E. Bou Farhat, et al.

- Transcriptomic analysis of 386 mesothelioma samples identified three clusters with distinct molecular features and outcomes following frontline therapy.
 - In Clusters 1 and 3, chemotherapy with or without bevacizumab was associated with longer overall survival than ICI therapy; outcomes did not differ by treatment in Cluster 2.
 - Cluster 3 showed frequent 9p21 deletions and enrichment of TGF- β /proliferative signaling, while Cluster 2 had an immune-engaged transcriptional profile.
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POSTERS

Session: P2.077-248 – Pathology and Biomarkers

Monday, September 14, 2026 / 10:30 AM – 12:00 PM KST / Exhibits and Posters, Hall C, 3F

P2.097: Prevalence and Spectrum of Germline Variants in Non-Small Cell Lung Cancer: Insights From a Large-Scale CARIS Analysis

N. Choradia, W. Gu, A.R. Naqash, et al.

- Clinically relevant germline alterations were identified in 12.2% of 3,609 NSCLC patients, most frequently involving *MUTYH*, *CHEK2*, *ATM*, *BRCA2*, and *MITF*.
- Race was the only demographic or smoking-related variable independently associated with germline variant classification.
- Among patients with linked tumor profiling, 45.8% of pathogenic/likely pathogenic/risk germline variants had a matching tumor variant.

P2.098: Germline Alterations in Small Cell Lung Cancer Identified Through Blood-Based Profiling

N. Choradia, W. Gu, R. Aljumaily, et al.

- Clinically relevant germline alterations were identified in 13.4% of 149 SCLC patients with germline findings, most frequently involving *MUTYH*, *APC*, *ATM*, *BRIP1*, and *CHEK2*.
- Among patients with linked tumor sequencing, 57.1% of clinically relevant germline variants had a matching tumor mutation, and 60.0% of patients had at least one matched variant.
- Buffy coat variant allele frequencies centered near 50%, with discordant variants showing patterns consistent with tumor-driven enrichment.

P2.102: Clinico-Biological Characteristics and Treatment Outcomes in Patients With RET+ Lung Cancer With non-LUAD Histology

A. Marinello, M. Lomibao, J.C.F. Quintanilha, et al.

- RET+ non-LUAD lung cancers represented 7.7% of 588 RET-MAP registry patients and had more brain metastases, with enrichment of proliferative, oncogenic, and metabolic pathways vs. LUAD.
- Non-LUAD histology was independently associated with shorter progression-free and overall survival following both selective RET inhibitors and first-line chemotherapy.
- Patients with large cell neuroendocrine carcinoma had a 75% objective response rate to selective RET inhibitors, with survival outcomes comparable to LUAD.

Session: P3.186-281 – Metastatic NSCLC – Targeted Therapy

Tuesday, September 15, 2026 / 9:30 AM – 11:00 AM KST / Exhibits and Posters, Hall C, 3F

P3.252: ITGB6 Expression and Real-World Outcomes in Non-Small Cell Lung Cancer

U. Karki, T. Adeyelu, F. Fayaz, et al.

- Across 34,022 NSCLC samples, ITGB6 expression varied by histology and genomic context and was higher in tumors with genomic driver alterations.
- High *ITGB6* expression was associated with improved real-world overall survival (rwOS) in LUAD but inferior rwOS in LUSC.
- *ITGB6* expression was not associated with rwOS following immunotherapy or EGFR TKI treatment, although high expression was associated with shorter time on EGFR TKI.

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