



IASLC



INTERNATIONAL
ASSOCIATION
FOR THE STUDY
OF LUNG CANCER

Conquering Thoracic Cancers Worldwide

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New KEYNOTE 021 Data Shows No Association with Tumor Mutational Burden

Barcelona—Researchers had previously reported data from the KEYNOTE 021 trial that showed antitumor activity for pembrolizumab plus platinum-based chemotherapy in untreated advanced nonsquamous non-small cell lung cancer patients. Today at the **IASLC 2019 World Conference on Lung Cancer hosted by the International Association for the Study of Lung Cancer**, the same research group presented new data from two new groups of patients from this trial.

The researchers, led by Corey Langer from Abramson Cancer Center of the University of Pennsylvania in Philadelphia, created two new groups: patients in cohort C received pembrolizumab plus carboplatin and pemetrexed. Patients in cohort G were randomized 1:1 to pembrolizumab plus carboplatin and pemetrexed or carboplatin and pemetrexed alone. Tumor mutational burden was determined by whole-exome sequencing of tumor and matched normal DNA.

Langer and the KEYNOTE 021 researchers were able to evaluate TMB data for 70 patients: 12/24 (50.0%) in cohort C, 32/60 (53.3%) in the cohort G pembrolizumab plus chemotherapy arm, and 26/63 (41.3%) in the cohort G chemotherapy only arm.

TMB as a continuous variable was not significantly associated with objective response rate, progression free survival or overall survival for pembrolizumab plus chemotherapy or chemotherapy alone. There was no significant correlation between TMB and Tissue Polypeptide-specific Antigen in patients treated with pembrolizumab plus chemotherapy.

“In this exploratory analysis, TMB was not significantly associated with efficacy of pembrolizumab plus carboplatin and pemetrexed or carboplatin and pemetrexed alone as first-line therapy for metastatic nonsquamous NSCLC,” Langer reported. “TMB was also not significantly correlated with PD-L1 expression. Among pembrolizumab plus chemotherapy-treated patients, ORR was high in both the TMB low and high subgroups.”

About the WCLC:

The WCLC is the world’s largest meeting dedicated to lung cancer and other thoracic malignancies, attracting more than 7,000 researchers, physicians and specialists from more than 100 countries. The goal is to increase awareness, collaboration and understanding of lung cancer, and to help participants implement the latest developments across the globe. The conference will cover a wide range of disciplines and unveil several research studies and clinical trial results. For more information, visit wclc2019.iaslc.org.

About the IASLC:

The International Association for the Study of Lung Cancer (IASLC) is the only global organization dedicated solely to the study of lung cancer and other thoracic malignancies. Founded in 1974, the association's membership includes more than 7,500 lung cancer specialists across all disciplines in over 100 countries, forming a global network working together to conquer lung and thoracic cancers worldwide. The association also publishes the *Journal of Thoracic Oncology*, the primary educational and informational publication for topics relevant to the prevention, detection, diagnosis and treatment of all thoracic malignancies. Visit www.iaslc.org for more information.

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