



SIGNIFICANCE OF THE LUNG IMMUNE PROGNOSTIC INDEX FOR ASSESSMENT OF THE RELIABILITY OF THE CLINICAL TREATMENT OUTCOME FOR ADVANCED NON-SMALL-CELL LUNG CANCER IN PATIENTS WITH COVID-19 INFECTION

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Objective:

Lung cancer is one of the most diagnosed malignancies with increasing incidence worldwide. Immunotherapy is the main oncological treatment for advanced non-small cell lung cancer (NSCLC), for which the discovery of new efficient biomarkers is crucial. Scientific evidence points to the importance of the Lung Immune Prognostic Index (LIPI), but its predictive significance is unclear. The aim of this study was to investigate the clinical significance and predictive role of LIPI in patients with advanced NSCLC and PD-L1 mutation who are eligible for immunotherapy in combination with chemotherapy. In addition, to our knowledge, this is the first time that the association between COVID-19 infection and the course and outcome of oncologic treatment of NSCLC has been investigated. P



Methods:

Patients were divided into four study groups according to strictly defined clinical parameters, therapeutic approach, and COVID-19 infection. LIPI was determined and its predictive power was evaluated in all studied groups, as well as overall survival (OS), progression-free survival (PFS), and disease control rate (DCR). R

Result:

This study confirmed the understudied and uncertain predictive power and clinical relevance of LIPI as a biomarker in patients with advanced NSCLC. Patients infected with COVID-19 had a higher survival rate than uninfected patients despite the therapeutic approach, which may be attributed to their hospitalization and intensive medical management during the pandemic

Conclusion:

Findings obtained in this study may help to determine treatment options according to the clinical condition of the patient by using LIPI values as a non-invasive, readily available and economically acceptable predictive biomarker in lung oncology.