

prognostic score of survival in 154 pts treated with 2nd IO. In this study we aim to validate the EPSILoN score in a different patient population group treated with IO in the same setting.

Methods: We enrolled 193 eligible patients at the National Cancer Institute of Milan, Italy. From 193 aNSCLC patients receiving single-agent anti-PD-(L)-1 as 2nd (61%) and \geq 3rd line (39%) we collected baseline complete blood cell count and estimated their ratio such as neutrophil-lymphocyte ratio (NLR). Also we evaluated baseline LDH level. Survival analyses using Kaplan–Meier method and multivariate analysis (Cox progression model) were performed to identify and confirm independent variables.

Results: Of 193 pts mPFS and mOS were 2.3 and 7.6 mo, respectively. Univariate and multivariate analyses for PFS adjusted for age, sex, smoke status, ECOG-PS, histology, disease site, confirmed heavy smoking status (\geq 40 pack/years) (HR 0.71, $p = 0.036$) and baseline LDH $<$ 400 mg/dl (HR 0.66, $p = 0.026$) as independent positive factors while ECOG-PS 2 (HR 1.79, $p < 0.001$), baseline liver mets (HR 1.48, $p = 0.04$) and NLR \geq 4 (HR 1.49, $p = 0.029$) as negative factors. The five baseline clinical and blood biomarkers (smoking status, ECOG PS, liver metastases, LDH and NLR), were included in the EPSILoN score to validate it in this cohort. Finally, three different survival groups defined as high, intermediate and low for PFS (6.0 vs 3.8 vs 1.9 mo respectively, HR 1.94 95% IC 1.51–2.48, $p < 0.001$) and OS (24.5 vs 8.9 vs 3.4 months, respectively HR 2.40, 95% IC 1.82–3.17, $p < 0.001$) were identified.

Conclusions: EPSILoN score which combine five baseline clinical and blood biomarkers may help identify patients who most likely will benefit or not from IO in clinical practice in aNSCLC patients treated with second-line IO. Furthermore, it seems to play an important role in both PFS and OS.

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160P **EPSILoN score: Validation cohort of a prognostic score in advanced non-small cell lung cancer (aNSCLC) patients treated with immunotherapy**

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Background: Despite the benefit in overall survival (OS), only 18-20% of aNSCLC patients (pts) respond to immunotherapy (IO) in second-line (2nd) with a median progression-free survival (mPFS) of 2-4 months (mo). We previously reported the role of EPSILoN score (Ecog-Ps, Smoke, Liver, Ldh, Nlr) as a clinical and biochemical