Serum mass-spectrometry test in first line advanced NSCLC patients treated with standard chemotherapy regimens

Grossi F1, Genova C1, Rijavec E1, Dal Bello MG1, Barletta G1, Burrafato G1, Biello F1, Sini C1, Grigorieva J2, Meyer K3, Roder H2
1 UOS Tumori Polinomai, IRCCS AOI San Martino IST – Istituto Nazionale per la Ricerca sul Cancro, Genova, Italy; 2 Biodexis, Inc. Boulder, USA

BACKGROUND

A novel salivary (NSCLC) test is one of the main causes of future advanced disease worsening. Previous studies of PD-L1 expression on tissue and on biopsies have been associated with a 5 months longer OS with no progression. OS is a validated endpoint in the field of NSCLC with significant clinical relevance.

PATIENTS AND METHODS

Sequential patients treated with advanced NSCLC or re-challenged after surgery or radiotherapy treatment are included for this study. CCBRA (Coated Black Red and Brown), a novel method for the classification of histological samples, was used to validate the PD-L1 expression on tissue.

The classification was based on the assessment of the expression status of a panel of proteins in the tumor microenvironment. The results of the classification were then compared with the OS and the PFS of each patient.

RESULTS

The analysis of the clinicopathological data showed that the classification of each patient was significantly associated with OS and PFS.

CONCLUSIONS

The results of the analysis showed that the OS and the PFS of each patient were significantly associated with the classification of the tumor microenvironment. This novel approach could be a promising tool for the personalized treatment of NSCLC patients.