1472P Immunotherapy in elderly patients (≥ 75 yrs) with advanced non-small cell lung cancer (NSCLC): A multicenter Italian experience

A. Luciani[1], L. Toschi[2], S. Fava[3], D. Cortinovis[4], V. Filipazzi[5], A. Tuzi[6], A. Marra[1], S. Rossi[7], A. Rossi[8], M. Blasi[1], M. Violati[1], L. Sala[4], F. Agustoni[4], P. Bidoli[4], S. Zonato[1], D. Ferrari[1]

[1]Medical Oncology, Azienda Ospedaliera S. Paolo, Milan, Italy, [2]Medical Oncology, Istituto Clinico Humanitas, Rozzano, Italy, [3]Medical Oncology, Ospedale Civile di Legnano, Legnano, Italy, [4]Medical Oncology, Azienda Ospedaliera S. Gerardo U.O. Oncologia Medica, Monza, Italy, [5]Medical Oncology, Ospedale Luigi Sacco, Milan, Italy, [6]Medical Oncology, Ospedale di Circolo Fondazione Macchi, Varese, Italy, [7]Medical Oncology, Istituto Clinico Humanitas, Rozzano, Italy, [8]Medical Oncology, IRCCS Casa Sollievo della Sofferenza, San Giovanni Rotondo, Italy

Background: Immunotherapy with anti PD-1 antibodies (mAbs) is the standard of care for the treatment of advanced Non-Small-Cell Lung Cancer (NSCLC). A conspicuous group of patients with advanced NSCLC are more than 75 years old. However, no randomized controlled trial exploring anti PD-1 therapy in older individuals has been published until now and few experiences in clinical practice have been reported. We therefore performed a multicenter retrospective analysis on NSCLC elderly patients treated with anti PD-1 therapy.

Methods: We collected data from seven centers. Inclusion criteria were a diagnosis of advanced NSCLC, age ≥75 years, and treatment with anti-PD-1mAbs (pembrolizumab or nivolumab) in first or following lines. Primary end-points of the study were efficacy, in terms of Disease Control Rate (DCR), Overall Response Rate (ORR), Progression-Free Survival (PFS), and safety, by means of immune-related adverse events (irAEs).

Results: The Clinical records of 72 patients followed since 2015 were analyzed. Median age was 77 years (75-86), males ware more frequently represented (60/72, 83%). A current or previous smoking history was found in 67/72 (93%) patients. Very old individuals (> 80 years old) were 21/72 (29%) and ECOG PS was 0-1 for 49/72 patients (63%). Non-squamous histology was prevalent 45/72, (62%). Brain metastases were found in 6/72 (8%) patients. Most of the patients (58/72, 81%) received nivolumab. For 68 patients, data on DCR, ORR were available. 39/68 (54%) had a DCR, while 17/68 (24%) had an ORR. Less than 10% of the patients had oligoprogression or pseudoprogression (8,3 and 9,7 % respectively). Overall immune-related adverse events occurred in 9/72 (14%) of individuals, 4/10 (40%) of them grade 3/4, being hematological and liver toxicities the most frequent ones (4 and 3%, respectively). At time of analysis, median PFS was 4,4 months (0.5-25 SD 5,53). In the Cox regression analysis, PFS was significantly influenced by DCR and smoking status ($p = 0,0001$, OR 17 95% CI 5,4 - 52,3 and $p = 0,001$, OR 11 95% CI 2,6-45, respectively).

Conclusions: In our cohort of elderly patients, anti PD-1 agents demonstrated to have a good toxicity profile and an efficacy comparable with the younger population.

Legal entity responsible for the study: I conducted the study recording and collecting clinical data from other colleagues and computing statistical part with other specialists of the San Paolo Hospital in Milan.

Funding: Has not received any funding.

Disclosure: All authors have declared no conflicts of interest.