1258P Baseline predictive factors for efficacy of anti-PD1 used in first line in melanoma patients: An Italian melanoma intergroup study

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Background: AntiPD1 Nivolumab (N) or Pembrolizumab (P) are an option for first line treatment in metastatic melanoma (MM) but predictive factors of efficacy are needed to choose between them or other treatment (antiPd1+AntiCTLA4, BRAF+MEK inhibitors (BMEi) for BRAF mutated melanoma). Many studies suggest that LDH, ECOG PS, tumor burden can identify BRAF mutated MM patients (pt) in which BMEi show better outcome. Similar data are not available for N or P in first line. We evaluate pt treated with N or P in first line in order to verify if these factors or other factors can be applied also to antiPD1.

Methods: A retrospective multicenter study was conducted in 13 Italian Oncology Centers, evaluating MM pt treated with N or P in first line from 2016. Endpoints were OS and PFS, Kaplan Mayer and Cox regression were applied for survival analysis.

Results: 236 pt were analyzed (51% treated with N, 7% BRAF mutated). ECOG PS was 0 in 169 pt, number of metastatic sites (Nu) was less then 3 in 135 pt, in 88 pt there were not visceral metastasis (Vi), LDH was normal in 141 pt, ratio between baseline neutrophils and total leukocytes count (Fr) was less then 0.7 in 152 pt: in univariate analysis, all this factors resulted significantly associated with better OS (all $p < 0.0003$) and PFS (all $p < 0.003$), the only exeption were pt with Nu less then 3 that resulted not significantly different in PFS then pt with higher Nu ($p\ 0.13$). In multivariate analysis all these factors were confirmed as significantly associated with better PFS and OS (all $p < 0.03$), with the exeption of Nu ($p\ 0.22$) A score was counted for every pt considering the number of favorable baseline factors present (normal LDH, ECOG PS 0, Vi 0, Fr < 0.7) 18 months-PFS was 69% in pt with all 4 favorable factors vs 41% in pt without favorables factors ($p\ value\ 0.0029$). 18 months-OS was 90% in pt with all four favoreble factors vs 48% in pt without favorables factors ($p\ value < 0.0001$).

Conclusions: ECOG PS 0, normal LDH, Fr < 0.7, absent Vi are indipendent baseline factors associated with favorable PFS and OS of MM pt treated with N or P in first line (instead of Nu – that was found relevant for BMEi in other study). Subgroup with all these factors has a better prognosis. These data can help first line treatment choice and should be evaluated prospectively.

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