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INCIDENCE OF PSEUDOPROGRESSION DURING NIVOLUMAB PLUS R-DA-EPOCH TREATMENT FOR PRIMARY MEDIASTINAL B-CELL LYMPHOMA

Ya. Mangasarova[1], A. Kravtsova[1], Hunan Julhakyan[1], A. Magomedova[1], E. Nesterova[1], O. Margolin[1], R. Abdurashidova[1], M. Bagova[1], E. Fastova[1], E. Zvonkov[1]

1. National Medical Research Centre for Haematology, Russian Federation, Moscow

INTRODUCTION

Primary mediastinal B-cell lymphoma (PMBCL) is an aggressive large B-cell lymphoma, exhibiting clinical and biological overlap with classic Hodgkin lymphoma, leading to the integration of immune checkpoint inhibitors (ICIs) into treatment protocols for PMBCL. The use of ICIs is associated with immune-related adverse events (irAEs), including novel patterns of response, related to their unique mechanism of action. Pseudoprogression (PP), an increase in the size of the primary tumor or the appearance of a new lesion followed by tumor regression, is a significant problem in assessing the effectiveness of ICIs and making decisions on further treatment.

AIM

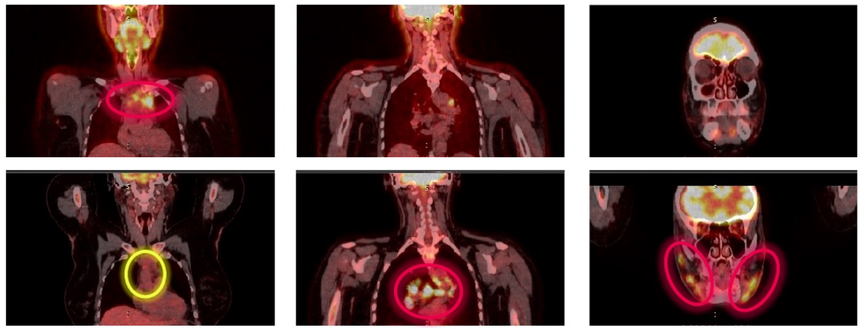
The primary objective of this analysis was to evaluate the incidence of PP in patients with PMBCL treated with R-DA-EPOCH+Nivolumab as first-line therapy.

METHOD

In the ongoing prospective randomized study NCT06188676, the addition of Nivolumab (Nivo) to R-DA-EPOCH is being evaluated in treating patients with newly diagnosed PMBCL.
All patients provided written informed consent.
Patients received immunochemotherapy for 4 to 6 cycles. Disease response assessments were performed by FDG-PET-CT according to LYRIC criteria and by clinical status after cycles 2, 4, and 6.

RESULTS

As of 25 May 2024, 45 patients with untreated PMBCL have been enrolled and randomly assigned to receive either Nivo plus R-DA-EPOCH (n = 15) or R-DA-EPOCH alone. No patient has discontinued therapy, and 39 patients (87%) have completed treatment to date. All 39 patients achieved complete remission. The median follow-up is 12 months. Overall survival and event-free survival are 100%. Pseudoprogression (PP) was detected in two out of 15 patients (13%) after the 2nd and 4th cycles, respectively. In both cases, PP was characterized by the appearance of hilar lymphadenopathy, with skin granulomatosis inflammation in one case.



PET-CT before treatment

PET-CT after 4 cycles of R-DA-EPOCH+Nivo

The effect after 4 courses of immunochemotherapy - the absence of the original lesion after treatment.

The appearance of PP as new metabolically active lesions (hilar lymphadenopathy, SUV 20) after 4 courses of immunochemotherapy.

The appearance of PP as a skin granulomatous inflammation (SUV 9).

CONCLUSIONS

Pseudoprogression, a rare irAE for ICIs therapy, has been observed in 13% of PMBCL patients treated with Nivo in our study. The challenge of properly assessing tumor response in patient management is significant to prevent inappropriate discontinuations of immunotherapy.

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CONTACT INFORMATION

Hunan Julhakyan

oncohematologist@mail.ru