MULTICENTER STUDY OF SAFETY AND EFFACACY NIVOLUMAB AT THE FIXED DOSE 40 MG (NIVO40) IN COMBINATION WITH CHEMO-IMMUNOTHERAPY FOR THE THEATMENT OF NEWLY DIAGNOSED PRIMARY MEDIASTINAL B-CELL LYMPHOMA (PMBCL)

Yana Mangasarova[1], Runiza Abdurashidova[1], Elena Baryakh[2], Natalia Mikhaylova[3], Hunan Julhakyan[1], Evgeny Zvonkov[1], Elena Parovichnikova[1]

1. National Medical Research Center for Hematology, 125167, Moscow, Russia
2. City Clinical Hospital No. 52, Moscow, Russia
3. RM Gorbacheva Research Institute of Pediatric Oncology, Hematology and Transplantology, St. Petersburg, Russia

Introduction

Immune checkpoint inhibitors have shown efficacy in relapsed/refractory PMBCL [1].

Aim

To assess the efficacy and safety of fixed low-dose nivolumab added to R-DA-EPOCH for first-line treatment in patients with newly diagnosed PMBCL

Methods

Multicenter, prospective, randomized phase II study (NCT06188676) conducted in Russia from July 2022 to December 2024.
Patients (N = 60) with newly diagnosed PMBCL were randomized 1:1 to:

- Arm A: R-DA-EPOCH alone
- Arm B: R-DA-EPOCH + nivolumab 40 mg IV on Day 1 of each cycle

Treatment duration was response-adapted based on PET/CT after cycles 2, 4, and 6 using Deauville criteria.

Second randomization (2:1) at cycle 4 in case of complete response to define treatment duration.

Results

CR following induction therapy was achieved in 80% of patients in Arm A and 100% in Arm B (P = 0.012). In Arm A, CR was observed in 26.7%, 13.3%, and 40% of patients after cycles 2, 4, and 6, respectively. In Arm B, CR was achieved in 16.7%, 30%, and 53.3% of patients at the same time points. Two patients in Arm A had a partial response. Disease progression during induction occurred in 13.3% of patients in Arm A, whereas no progression was observed in Arm B (P = 0.056). One death due to infection was reported in Arm A. Early therapy discontinuation after 4 cycles due to CR occurred in 4 patients in Arm A and 5 in Arm B, without negative impact on treatment outcomes.

Summary

The addition of low-dose nivolumab to R-DA-EPOCH in newly diagnosed PMBCL patients resulted in higher rates of complete metabolic response and absence of disease progression during induction therapy. Early discontinuation of treatment after achieving CR did not negatively affect outcomes.

Discussion

- Nivolumab + R-DA-EPOCH improves CR rates vs. R-DA-EPOCH alone.
- No disease progression was observed during induction in the combination arm.
- Early treatment discontinuation in responders appears safe and feasible.

References

1.Zinzani PL, Thieblemont C, Melnichenko V, et al. Pembrolizumab in relapsed or refractory primary mediastinal large B-cell lymphoma: final analysis of KEYNOTE-170. *Blood*. 2023;142(2):141–145.