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POSTER ABSTRACTS

624.HODGKIN LYMPHOMAS AND T/NK CELL LYMPHOMAS: CLINICAL AND EPIDEMIOLOGICAL

Anti-PD-1 Antibody Sintilimab in Combination with Anlotinib and Pegaspargase As a Highly Effective Salvage Regimen for the Treatment of Relapsed or Refractory Natural Killer /T-Cell Lymphoma

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Natural killer/T-cell lymphoma (NKTCL) is a rare and aggressive neoplasm associated with Epstein-Barr virus (EBV) infection. When patients experience relapse or disease progression after initial treatment, options for salvage therapy are limited. Targeting the PD-1/PD-L1 pathway has emerged as a highly potent treatment approach for NKTCL. However, the overall response rate (ORR) and complete response (CR) rate were limited with a short median progression-free survival (PFS) of 2.7 months. Therefore, improving the efficacy of immune checkpoint inhibitors is a critical clinical concern. In this study, we reported the efficacy and safety of a novel triplet regimen called LEAP, which combines PD-1 blockade (sintilimab 200mg on day 1), pegaspargase (2500U/m2 capped at 3750U on day 1), and angiogenesis inhibitor anlotinib (8mg on day 1-14), as a salvage treatment for relapsed/refractory (R/R) NKTCL. From March 2019 to May 2020, a total of 33 patients with R/R NKTCL were included in this study. The median age of patients was 48 years (range: 18-76), with 75.8% being male. At study entry, 88% of patients had stage IV disease, while 4 patients had stage II disease, with a history of primary refractory response to radiotherapy and L-asparaginase-based combination therapy. Moreover, 69.7% of patients had refractory disease, including those who were progressive or non-responsive to L-asparaginase-based regimens. Additionally, 10 patients experienced relapse or disease progression within 6 months after prior L-asparaginase-based therapy, and 10 patients had a history of PD-1/PD-L1 blockade monotherapy. A total of 221 cycles of the LEAP regimen were administered to these patients. The median number of cycles was 8 (range: 2-8). All patients reported at least one or more adverse events (AE). Hematological toxicities were mild, with no grade 3/4 neutropenia, anemia, or thrombocytopenia observed. Non-hematological AEs were common, and the most frequent (>20%) included hypofibrinogenemia (66.7%), hyperbilirubinemia (57.5%), APTT prolongation (54.5%), ALT elevation (54.5%), AST elevation (51.5%), hypoalbuminemia (48.5%), appetite loss (60.6%), nausea (57.5%), fatigue (57.5%), weight loss (42.4%), and edema (27.3%). These adverse events were typically attributed to pegaspargase. Other adverse events such as hyponatremia (24.2%), hypertriglyceridemia (21.2%), hyperglycemia (21.2%), hypothyroidism (30.3%), hypertension (24.2%), fever (39.4%), and dysphonia (21.2%) were most likely due to sintilimab or anlotinib. Most adverse events were manageable with supportive care. Among the 33 patients, the ORR was 81.8%, and CR was 45.5. The progression-free survival (PFS) rate at 1-year was 54.6% (95% CI, 36.3% to 70.0%), and at 2 years, it was 44.2% (95% CI, 26.6% to 60.4%). The median PFS time was 21.7 months. The overall survival (OS) rate at 1-year was 66.7% (95% CI, 47.9% to 80.0%), and at 2 years, it was 51.5% (95% CI, 33.5% to 66.9%). The median OS time was not reached during the study period. In conclusion, our study demonstrates that the LEAP regimen has a favorable safety profile, and is highly effective as a salvage treatment for patients with relapsed and refractory NKTCL.

Disclosures No relevant conflicts of interest to declare.

OffLabel Disclosure: sintilimab: PD-1 blockade, pegaspargase: a pegylated form of l-asparaginase anlotinib: angiogenesis inhibitor anlotinib.

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