



# The 65th ASH Annual Meeting Abstracts

## POSTER ABSTRACTS

### 731.AUTOLOGOUS TRANSPLANTATION: CLINICAL AND EPIDEMIOLOGICAL

#### Upfront Autologous Stem Cell Transplant at First Complete Remission in Patients with Advanced-Stage Extra-Nodal NK/T Cell Lymphoma: A Multicenter Retrospective Study

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**Objective:** Treatment outcome of patients with advanced-stage extranodal NK/T cell lymphoma (NKTCL) remains unsatisfactory. The role of consolidation therapy with autologous stem cell transplantation (ASCT) at first complete remission (CR1) in these patients is controversial. This study aimed to investigate the effect of upfront ASCT on the prognosis of patients with advanced-stage NKTCL achieving CR1 to frontline therapy.

**Methods:** This is a multicenter retrospective study. Data were collected from patients diagnosed with NKTCL between 2006 and 2021 in the China Lymphoma Collaborative Group (CLCG) database. The inclusion criteria were as follows: pathologically confirmed diagnosis of NKTCL, age  $\leq 65$  years at diagnosis, stage III or IV disease, and achievement of CR1 at the completion of frontline induction therapy. Clinical characteristics, treatment including the use of ASCT, and follow-up information were reviewed. The primary endpoints were progression-free survival (PFS) and overall survival (OS).

**Results:** A total of 99 patients from 14 medical centers in China were included in this study. The median age was 38 years (range: 6-64 years). Sixteen patients (16%) had an ECOG-PS  $\geq 2$  at diagnosis, and 26 patients (26%) presented with primary extra-nasal disease. The baseline Prognostic Index for NK-cell lymphoma (PINK) was  $\geq 2$  in 63 patients (64%). Regarding first-line treatment, 85 patients (86%) received non-anthracycline-based chemotherapy, and the remaining patients received anthracycline-based chemotherapy. At the time of CR1, 32 patients (32%) received upfront ASCT consolidation and 67 patients did not. Baseline clinical characteristics were comparable between the ASCT group and non-ASCT group. With a median follow-up time of 33 months, median PFS was not reached in the ASCT group versus 46 months in the non-ASCT group (3-year PFS: 76.6% versus 54.9%,  $P=0.012$ ). OS was not significantly different between the ASCT group and the non-ASCT group (3-year OS: 85.2% versus 69.4%,  $P=0.098$ ). In multivariate analyses, upfront ASCT was independently associated with better PFS (HR=0.40, 95%CI 0.17-0.94,  $P=0.037$ ) after adjusting for baseline PINK score and types of first-line chemotherapy (anthracycline-based versus non-anthracycline-based). Only non-anthracycline-based first-line chemotherapy (HR=0.32, 95%CI 0.11-0.88,  $P=0.028$ ) was associated with better OS in multivariate analysis.

**Conclusions:** In this multicenter real-world study, upfront ASCT improves PFS of patients with advanced stage NKTCL achieving CR1 to front-line chemotherapy, but the effect of upfront ASCT on OS in the era of non-anthracycline-based chemotherapy remains uncertain. The specific subgroups of patients most likely to gain a survival benefit from upfront ASCT need to be further investigated.

**Disclosures** No relevant conflicts of interest to declare.

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