



The 65th ASH Annual Meeting Abstracts

ONLINE PUBLICATION ONLY

722.ALLOGENEIC TRANSPLANTATION: ACUTE AND CHRONIC GVHD, IMMUNE RECONSTITUTION

Short-Term Substitution of Calcineurin Inhibitors (CNIs) with Recombinant Humanized Anti-CD25 Monoclonal Antibody (anti-CD25 rhMAB) As aGVHD Prophylaxis in Cnis Intolerant Patients after Allogeneic Hematopoietic Stem Cell Transplantation

Shan Shao, MD¹, Huixia Liu, MD², Ying Jiang², Su Li², Daolin Wei², JUN Zhu³, Chun Wang², Chuxian Zhao¹

¹ Department of hematopoietic stem cell transplantation, Shanghai Zhaxin Traditional Chinese and Western Medicine Hospital, Shanghai, China

² Shanghai Zhaxin Traditional Chinese and Western Medicine Hospital, Shanghai, China

³ Shanghai Zhaxin Traditional Chinese and Western Medicine Hospital, SHANGHAI, CHN

Objectives: To investigate the efficacy of short-term substitution of Recombinant humanized anti-CD25 monoclonal antibody (anti-CD25 rhMAB) as aGVHD prophylaxis in CNIs intolerant patients after allogeneic hematopoietic stem cell transplantation (Allo-HSCT).

Methods: From August 2021 to August 2022, seventeen patients with refractory hematologic malignancies after salvage Allo-HSCT were enrolled in our study. All were treated with anti-CD25 rhMAB as GVHD prophylaxis due to severe CNIs intolerance such as acute renal dysfunction, central nervous system complications (CNSC) or endothelial injury syndromes. There were seven males and ten females, with a median age of 43 years (18-67). After the withdrawal of CNIs, anti-CD25 rhMAB was applied at 1mg/Kg once a week until the reinstatement of CNIs or mTOR inhibitors.

Results: Anti-CD25 rhMAB was initiated at a median of 5 days (range: 1-32) after HSCT. The median duration of substitution was 20(7-120) days. All achieved neutrophil engraftment after a median of 12 days (range: 10-17). Thirteen patients had platelet engraftment after a median of 13 days (range: 11-20). Four patients did not achieve stable platelet engraftment. Eight patients (47.1%) developed Grade II-IV aGVHD, and four (23.6%) developed Grade III-IV aGVHD. Only one patient died of aGVHD. Until December 31, 2022, Seven of 17 patients died. The longest follow-up time of the survivors was 347 days, and the median survival was not reached. Overall survival (OS) at six months was 62.6%. OS at six months was 80.0% in the subgroup with CNSC.

Conclusions: When CNIs intolerance occurs during Allo-HSCT, Short-term replacement of CNIs with anti-CD25 rhMAB is an optional approach, which may provide a promising aGVHD prophylaxis for patients with CNIs intolerance.

Disclosures No relevant conflicts of interest to declare.

<https://doi.org/10.1182/blood-2023-173673>