Abstract: PB2476

Title: PROPHYLACTIC THERAPY OF EPIGENETIC AGENTS IN HIGH-RISK AML WITH RUNX1-RUNXT1 AFTER ALLO-HSCT

Abstract Type: Publication Only

Topic: Acute myeloid leukemia - Clinical

Background:

Disease recurrence is the leading cause of treatments failure in acute myeloid leukemia (AML) with RUNX1-RUNXT1 patients after allogeneic hematopoietic stem cell transplantation (allo-HSCT). Post-transplantation maintenance therapy guided by monitoring minimal residual disease (MRD) has been administrated in AML with RUNX1-RUNXT1. However, our previous study has found that relapse rate is still high in AML patients with RUNX1-RUNXT1 after receiving preemptive therapy.

Aims:

We conducted a prospective study to investigate the efficacy and safety of epigenetic agents administrated as post-transplantation prophylactic therapy in a larger cohort of AML with RUNX1-RUNXT1 and compare them with preemptive group.

Methods:

30 high-risk patients receiving prophylactic therapy (n=17 in chidamide group; n=13 in AZA group) were enrolled between January 2019 to July 2023.

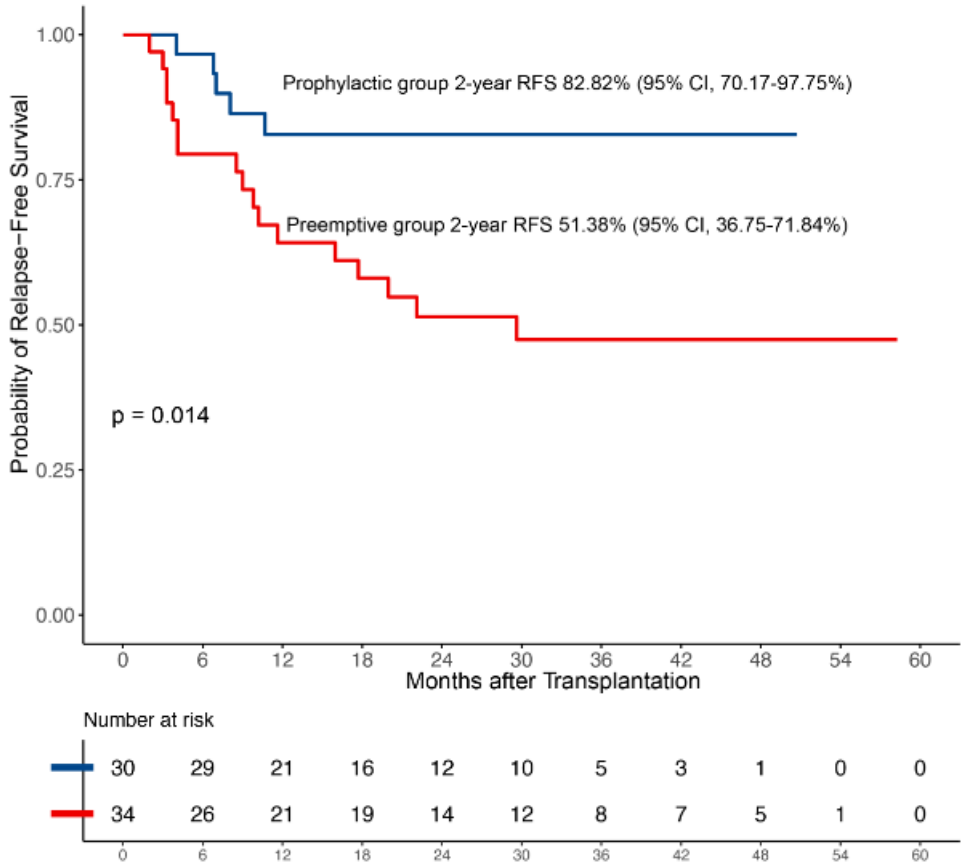
Results:

34 patients receiving preemptive therapy were analyzed as control group. The 2-year relapse-free survival (RFS) and overall survival (OS) was significantly improved in prophylactic group, compared with preemptive group (82.82% vs 51.38%, P=0.014; 86.42% vs 56.16%, P=0.025). The 2-year cumulative incidence of relapse (CIR) was 13.8% and 36.40%, respectively (P=0.037). In the landmark analysis, patients in the prophylactic group still had a longer RFS (95.8% vs 67.3%, P=0.015) and OS (100% vs 72.0%, P=0.006) compared with preemptive group. Hematological toxicity was the most common adverse effect both in AZA and chidamide group. The grades III-IV hematological toxicities were 58.8% (10/17) in chidamide group and 38.5% (5/13) in AZA group.

Summary/Conclusion:

To a conclusion, prophylactic therapy of epigenetic agents might enhance long-term prognosis with well tolerance for high-risk AML patients with RUNX1-RUNXT1. Besides, receiving post-transplantation prophylactic therapy timely may be a better choice, instead of basing on the positive MRD results to initiate the preemptive therapy.

Figure



Keywords: allo BMT, Acute myeloid leukemia, Recurrence