

OUTCOMES OF CONSOLIDATIVE ALLOGENEIC TRANSPLANTATION AFTER VENETOCLAX PLUS HYPOMETHYLATING AGENT INDUCTION IN ACUTE MYELOID LEUKEMIA: A SINGLE-CENTER RETROSPECTIVE STUDY

M. Tamutytė-Jankauskė^{1,2}, M. Mikalonytė^{1,2}, T. Smalinskaitė^{1,2}, G. Daukėlaitė^{1,2}, L. Kevličius¹, L. Davainis¹, I. Trociukas¹, A. Slobinas¹, R. Jucaitienė¹, I. Šlepikienė¹, R. Kviliūtė¹, R. Batiuškaitė¹, L. Griškevičius^{1,2} and A. Žučenka^{1,2}

1. Vilnius University Hospital Santaros Klinikos, Hematology, Oncology, and Transfusion Medicine Center, Vilnius, Lithuania
2. Vilnius University, Faculty of Medicine, Institute of Clinical Medicine, Vilnius, Lithuania



INTRODUCTION

Venetoclax combined with hypomethylating agents (Ven+HMA) has emerged as the standard low-intensity induction strategy for AML patients ineligible for intensive chemotherapy^{1,2}

AIM

To present a single-center experience of allogeneic hematopoietic stem cell transplantation (allo-HSCT) following Ven+HMA induction in AML and AML with myelodysplastic changes (AML/MDS).

- **Single-center retrospective** study
- **24 patients** with AML (n=17) or AML/MDS (n=7), treated between 2023 – 2025
- Primary outcomes: pre- and post-transplant MRD status (flow cytometry <0.1% and/ or molecular), best response, overall survival, relapse, non-relapse mortality and GVHD

METHODS

Induction regimen	VEN7/14-DAC5 (n=16, 66.7%) AZA7-VEN7/14 (n=8, 33.3%)
Conditioning regimen	myeloablative (MAC) (n=3, 12.5%) reduced-intensity (RIC) (n=21, 87.5%)
Donors	matched unrelated (MUD; n=16, 66.7%) haploidentical (n=6, 25%) matched sibling (MSD; n=2, 8.3%).

CONCLUSIONS

In our cohort, allo-HSCT after Ven+HMA bridging **demonstrated favorable outcomes despite a substantial proportion of patients being MRD-positive prior to transplantation.** Transplant-related mortality and graft-versus-host disease remain the key challenges.

RESULTS

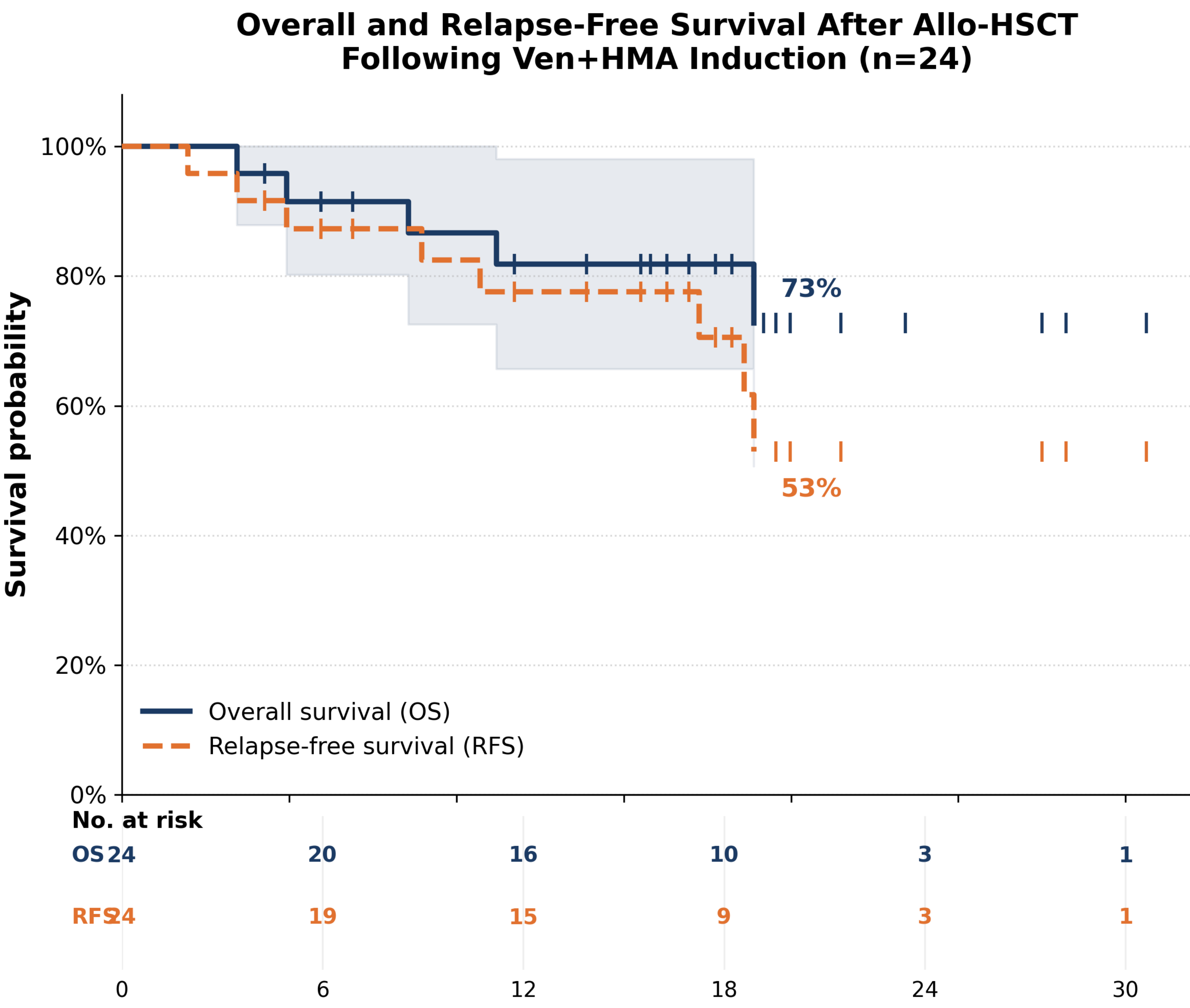


Figure 1. Kaplan-Meier Estimates of Overall and Relapse-Free Survival. Statistical visualization (Kaplan-Meier analysis) performed using Claude (Anthropic).

Cohort	
Patients proceeding to allo-HSCT	24 / 135 Ven+HMA patients (17.8%)
Diagnosis	AML 17 (70.8%) · AML/MDS 7 (29.2%)
Adverse risk (ELN 2022/2024)	6 / 24 (25.0%)
Median age, years (range)	67 (36-75)
Cycles of Ven+HMA before SCT, median (range)	2 (1-4)
Pre-Transplant MRD (MFC)	
MRD-negative	9 / 24 (37.5%)
MRD-positive	15 / 24 (62.5%)
Post-Transplant Response	
Complete remission (CR)	19 / 24 (79.2%)
CR with incomplete recovery (CRi)	1 / 24 (4.2%)
Morphologic leukemia-free state (MLFS)	3 / 24 (12.5%)
MRD negativity achieved	23 / 24 (95.8%)
Outcomes at Median Follow-up (16.6 months)	
Alive	19 / 24 (79.2%)
Relapse (molecular 4, morphological 3)	7 / 24 (29.2%)
Any-grade GVHD	13 / 24 (54.2%)
Death	5 / 24 (20.8%)
Median overall survival	Not reached

Table 1. Baseline Characteristics, Response, and Outcomes. Statistical visualization (Kaplan-Meier analysis) performed using Claude (Anthropic).

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CONTACT INFORMATION

milvyde.tamutyte@santa.lt

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