ALLOGENEIC HEMATOPOIETIC CELL TRANSPLANT IN T-CELL LYMPHOMA IN THE ERA OF PTCY-BASED GVHD PROPHYLAXIS

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Introduction

- T-Cell Lymphomas (TCLS) represent 10-15% of worldwide non-Hodgkin Lymphomas (NHLs)
- Early studies suggest that allogeneic hematopoietic cell transplantation may improve outcomes for some TCLs, but transplant timing remains controversial
- Recent studies show patients with post-transplant cyclophosphamide based GVHD prophylaxis has a better GVHD free, PFS survival

Objectives

Determine outcomes of patients with TCLs who receive early HCT using post-transplant cyclophosphamide (PTCy)-based graft-vs-host-disease (GvHD) prophylaxis.

Methods

- Single-center retrospective study
- TCL patients receiving HCT between April 2018 and November 2023
- Follow-up as of March 1st 2025

Patient Characteristics

Median Age	59 (33-74)
Gender	M – 11 (47%), F – 12 (53%)
Disease	
ATLL	9
AITL	6
PCGD-TCL	2
Hepatosplenic TCL	1
EBV+ nPTCL/nTNKL	1
PTCL, NOS	3
T-LBL	1
Disease Staging	
CR1	10
CR2	6
CR3	1
PR	4
PD	1
Transplant Type	
MRD	3
Haploidentical	12
MUD	2
MMRD	5
Cord blood	1
Conditioning Regimen	
MA	2
RI	12
NMA	9
Graft-versus-Host Disease Prophylaxis Regimen	
PTCy-containing*	21
Tacrolimus/MMF	2

Results

Median follow up 24.8 months (1.6-63.7 m)

Clinical outcomes

- 2-year OS 73.7%
- 2-year RFS 69.1%
- 2-year GRFS 43.5%

In CR1 at transplant:

- 2-year OS 90%
- 2-year RFS 90%

In ≥CR2 at transplant:

- 2-year OS 42.9%
- 2-year RFS 42.9%

Improved outcomes for TCL patients with HSCT and PTCy GvHD prophylaxis

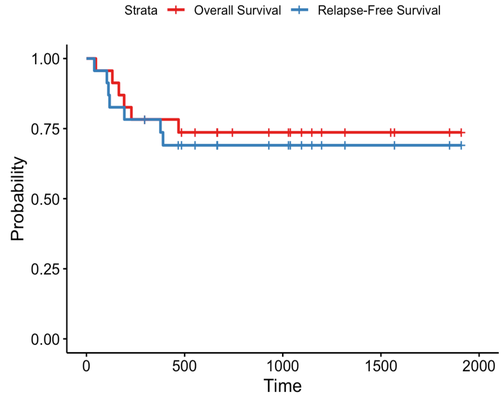


Figure 1. Survival analysis for OS and RFS for patients with TCL undergoing HSCT

Complications

Graft-vs-Host Disease

- 21.7% experienced grade II-IV aGvHD
- 3 cases moderate cGvHD
- 1 case severe GvHD
- 8 patients required prednisone tapers
- 2 patients required ruxolitinib

Infectious

- 1 EBV reactivation treated with rituximab
- 1 adenovirus reactivation self-resolved

Discussion

Patients with TCL undergoing allo-SCT with PTCy-based GvHD prophylaxis show encouraging RFS and OS. These patients may benefit from early HCT after achieving CR.