

# ALLOGENEIC HEMATOPOIETIC CELL TRANSPLANTATION FOR PTCL: AMERICAN PERSPECTIVE

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# ALLOGENEIC HCT IN PTCL

➤ WHO

➤ WHEN

➤ HOW

# ARE ALL ALLOGRAFTS THE SAME?

- **Myeloablative conditioning**
- **Reduced-intensity conditioning**
- **Non-Myeloablative conditioning**
- **Cord blood transplants**

# Successful Treatment of Mature T-Cell Lymphoma with Allogeneic Stem Cell Transplantation: The Largest Multicenter Retrospective Analysis

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# ALLO-HCT IN PTCL: PATIENT CHARACTERISTICS

## Age (years)

Median (Range)	49 (17-74)
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## Gender

Male	183 (60.8%)
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## Prior Transplants

Autologous	48 (15.9%)
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## HCT-Comorbidity Index

Median (Range)	1 (0-8)
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## Remission Status (n=296)

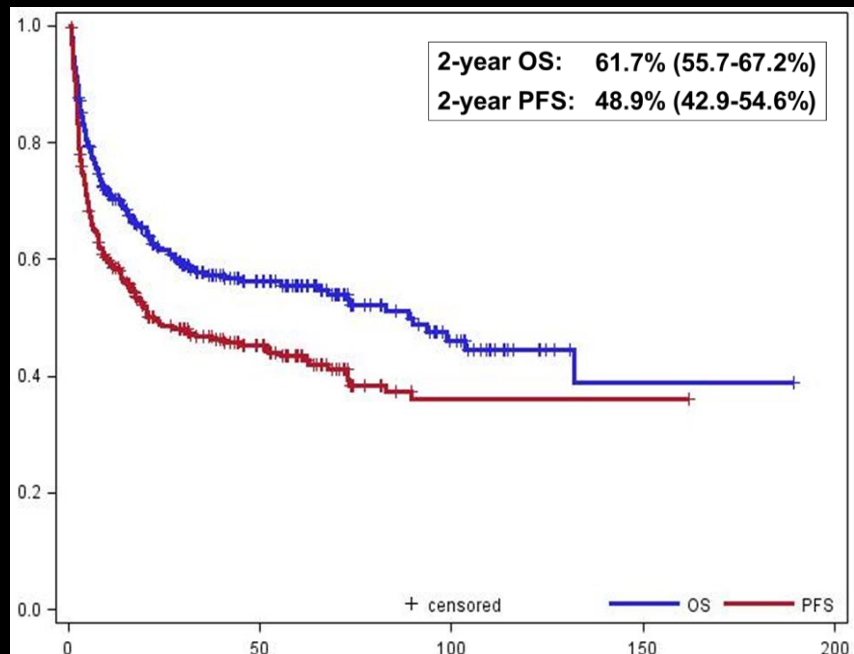
CR	172 (60.1%)
PR	96 (33.6%)
SD	10 (3.5%)
PD	8 (2.8%)

## Donor Source (n=298)

Matched Related (MRD)	123
Matched Unrelated (MUD)	112
Mismatched (MMD)	25
Haploidentical	13
Cord Blood	25

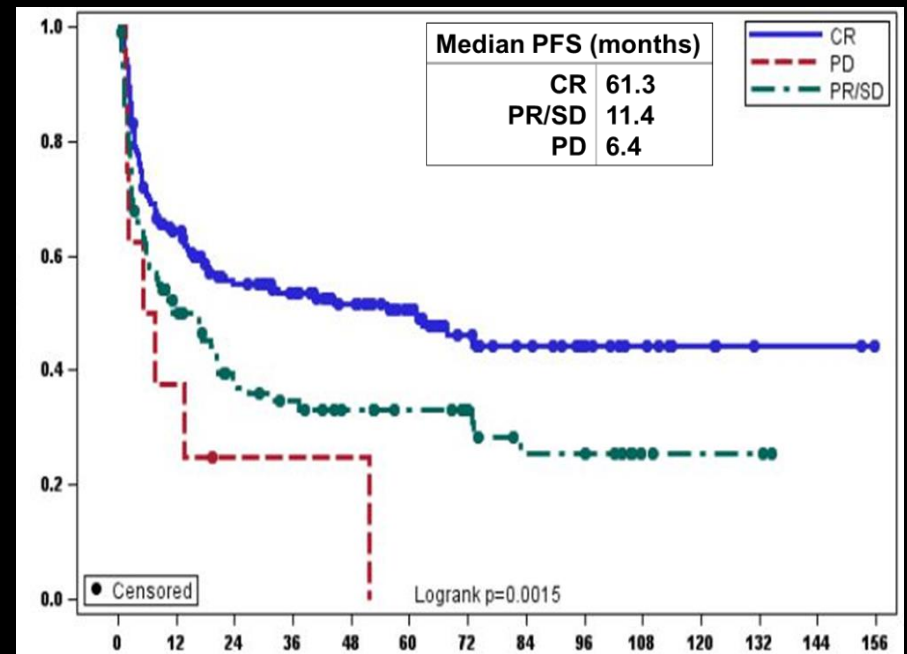
# ALLO-HCT IN PTCL: SURVIVAL OUTCOMES

## OS and PFS (N=301)



Time (months)

## PFS by Dz Status prior to HCT



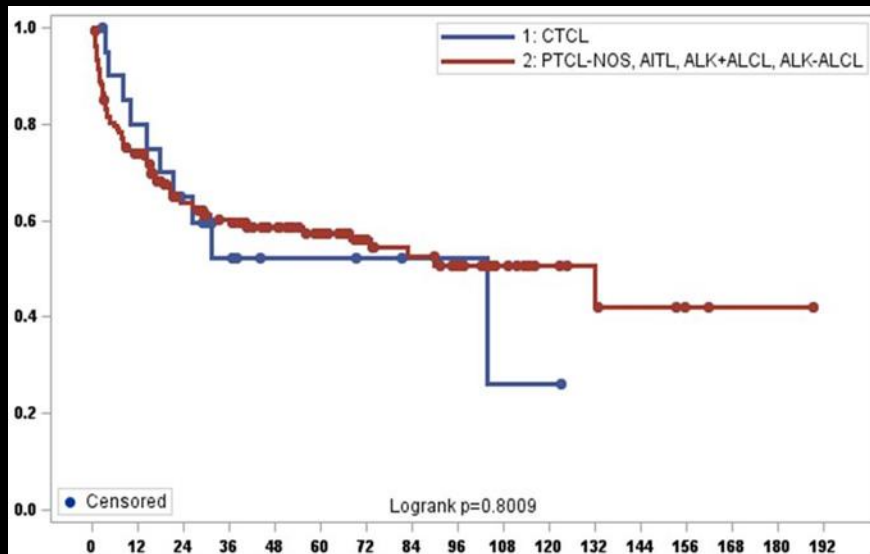
Time (months)

# ALLO-HCT IN PTCL: HISTOLOGY SPECIFIC SURVIVAL

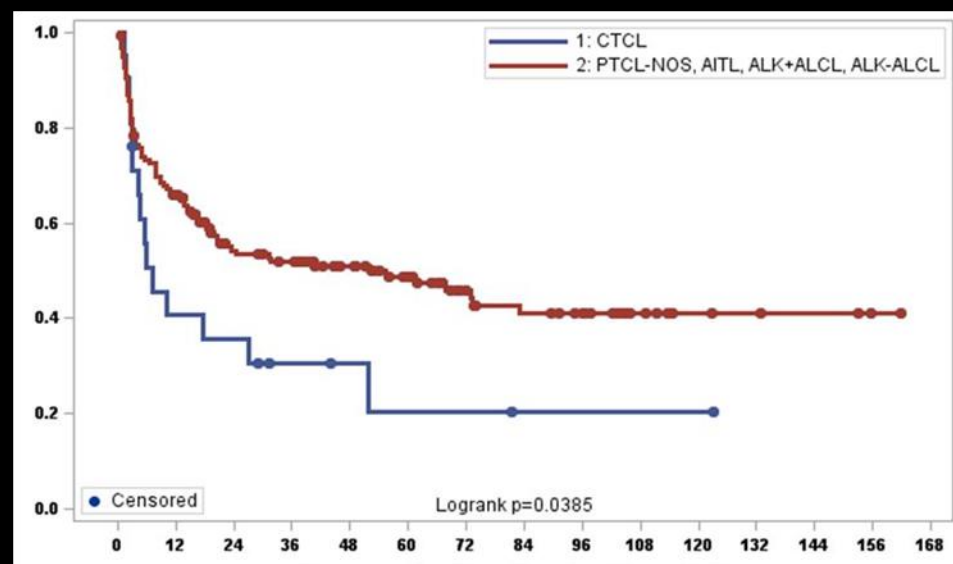
Disease Type (N)	Remission Status at Transplant	Conditioning Regimen Intensity	2 – yr PFS (95% CI)	Disease Type (N)	Remission Status at Transplant	Conditioning Regimen Intensity	2 – yr PFS (95% CI)
PTCL, NOS (82)	45 CR 24 PR 4 SD 3 PD 1 UNK	38 MA 36 NMA 8 RIC	56.48% (44.69-66.68%)	ALK pos ALCL (13)	11 CR 2 PR	8 MA 5 NMA	36.92% (12.51-62.03%)
AITL (50)	31 CR 15 PR 1 SD 2 PD	20 MA 23 NMA 7 RIC	60.3% (44.87-72.66%)	ALK unk ALCL (12)	7 CR 4 PR 1 SD	8 MA 2 NMA 2 RIC	33.33% (10.27-58.84%)
NK/T (35)	20 CR 12 PR 1 UNK	24 MA 10 NMA 1 RIC	39.62% (23.58-55.25%)	ALK neg ALCL (10)	9 CR 5 PR 1 UNK	4 MA 5 NMA 1 RIC	25% (4.08-54.85%)
Hepatosplenic (29)	13 CR 10 PR 2 SD 1 PD 2 UNK	18 MA 7 NMA 3 RIC 1 UNK	46.07% (26.24-63.84%)	Primary Cutaneous ALCL (10)	8 CR 1 PR 1 PD	3 MA 7 NMA	40% (12.27-67.02%)
CTCL (21)	7 CR 12 PR 1 SD 1 PD	5 MA 10 NMA 5 RIC 1 UNK	35.56% (16.01-55.79%)	Subcutaneous Panniculitic- like T-cell (9)	5 CR 4 PR	3 MA 4 NMA 2 RIC	66.67% (28.17-87.83%)
ATLL (15)	9 CR 5 PR 1 UNK	3 MA 3 NMA 8 RIC 1 UNK	57.14% (28.40-77.97%)	Enteropathy- associated (5)	4 CR 1 SD	1 MA 3 NMA 1 RIC	40% (5.2-75.28%)
Primary Cutaneous gamma-delta TCL (3)	1 CR 1 PR 1 UNK	2 MA 1 UNK	-	Plasmacytoid dendritic cell neoplasm (4)	3 CR 1 PR	3 MA 1 NMA	75% (12.8-96.06%)
MF/Sezary (3)	3 PR	1 NMA 2 RIC	66.67% (13.32-100%)	-	-	-	-

# ALLO-HCT IN PTCL vs CTCL

## OS: PTCL vs CTCL

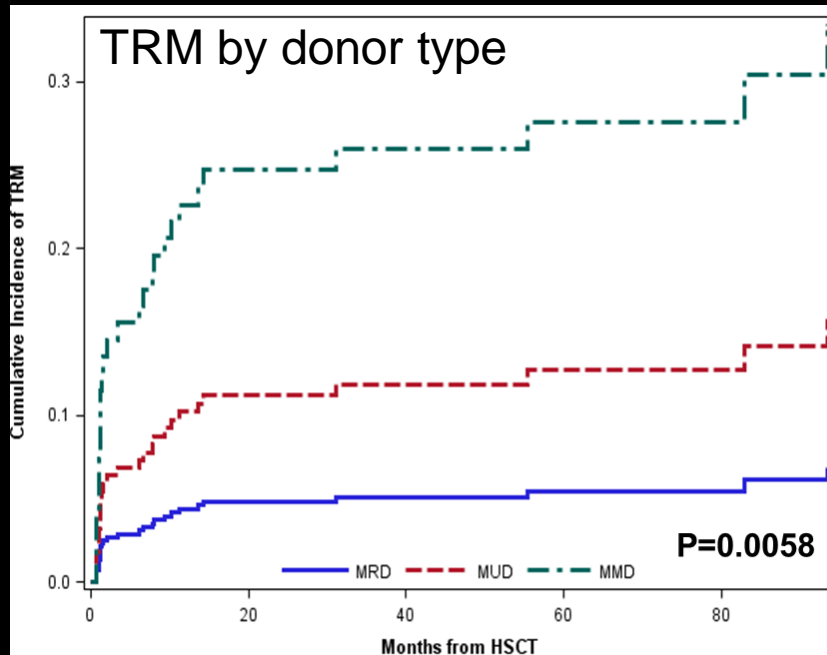


## PFS: PTCL vs CTCL





# ALLO-HCT IN PTCL: TRM AND GVHD



## Transplant-related mortality (TRM) at 6 mo

9.2 % (5.1-13.2%)

### By Donor Type

MRD	2.9% (1.4-6.2%)
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MUD	6.8% (3.3-14.1%)
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MMD	15.5% (8.2-29.6%)
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## Graft-vs-Host-Disease

Acute	129/293 (44%)
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Chronic	107/276 (39%)
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## Cause of Death (n=134)

Disease	59 (44%)
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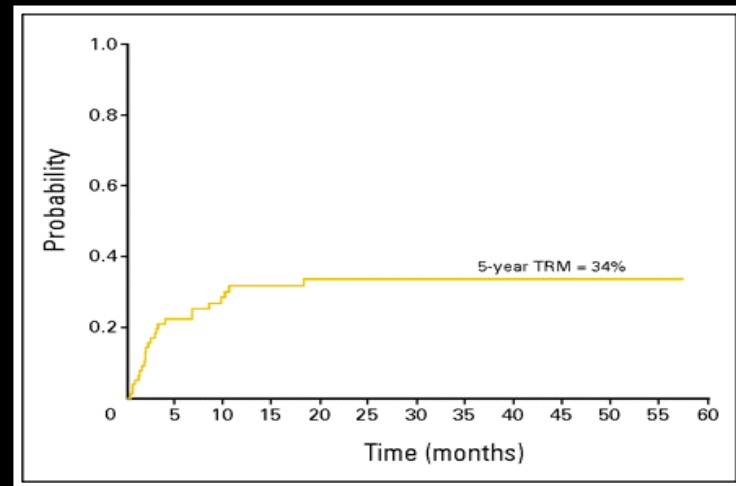
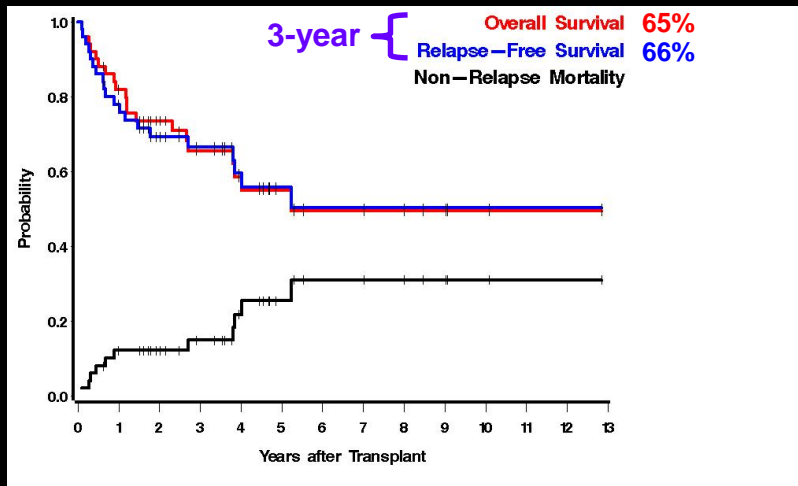
Transplant	32 (24%)
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Unknown	43 (32%)
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# FHCRC EXPERIENCE

Characteristic	No. of Patients (N=50)	%
<b>Sex</b>		
Male	28	56
Female	22	44
<b>Age, years</b>		
Median	55	
Range	22-73	
>60 years	13	26
<b>Time from diagnosis to HCT, years</b>		
Median	1.6	
Range	0.47-20.3	
<b>Histology</b>		
PTCL-NOS	11	22
AITL	11	22
ALCL ALK-	7	14
ALCL ALK+	2	4
MF	8	16
T-PLL	7	14
NK-cell	2	4
HSTCL	1	2
ATL/L	1	2
Aggressive NK-leukemia	1	2

# FHCRC EXPERIENCE



# PTCL: WHO SHOULD GET ALLOTRANSPLANT

- Patients with relapsed and refractory PTCL
- Patients with post-autoHCT relapse of PTCL
- Newly diagnosed PTCL:
  - high-risk disease (IPI\* = 4-5)
  - High-risk histology
    - Hepatosplenic T-cell lymphoma
    - G-d T-cell lymphomas
    - Adult T-cell Leukemia/Lymphoma\*

*“If we knew what it  
was we were doing, it  
would not be called  
research, would it?”*

