

# **HSCT Outcomes: 2025 Cumulative Annual Summary**

**Cumulative Analysis of All 2025 Transplants - Overall Survival, Mortality, and GVHD Endpoints**

Transplant Outcomes Analysis

2026-01-21

## **Executive Summary**

This report provides a **cumulative analysis** of all **26 patients** who underwent HSCT during calendar year 2025.

### **Key Outcomes Analyzed:**

1. **Overall Survival (OS):** Percentage of patients alive at specific timepoints
2. **Non-Relapse Mortality (NRM):** Deaths from transplant-related complications
3. **Transplant-Related Mortality (TRM):** Equivalent to NRM
4. **Relapse-Related Mortality:** Deaths from disease relapse
5. **Acute GVHD Grade II-IV:** Clinically significant acute GVHD
6. **Chronic GVHD:** Total, Mild, and Moderate-Severe

### **Overall Results (Cumulative 2025):**

- **Total Patients:** 26
- **Total Deaths:** 1 (3.8%)
- **Overall Survival:** 96.2%
- **NRM/TRM Events:** 1 (3.8%)
- **Relapse Deaths:** 0 (0%)
- **Acute GVHD Grade II-IV:** 7 (26.9%)
- **Chronic GVHD (Any):** NA (NA%)

### Limited Follow-up Period

This cohort has **limited follow-up time** with transplants occurring throughout 2025. Earlier transplants (Q1) have longer follow-up than later transplants (Q4). Results should be interpreted with caution, especially for late timepoints (365 days) and chronic GVHD assessment.

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## Methodology

### Endpoint Definitions

#### Overall Survival (OS):

- Percentage of patients alive at specific timepoints (Day 30, 100, 365)
- Calculated as: (Number Alive / Total N) × 100

#### Non-Relapse Mortality (NRM) / Transplant-Related Mortality (TRM):

- Deaths from any cause OTHER THAN disease relapse
- Includes: GVHD, infections, organ toxicity, other transplant complications
- NRM = TRM in this analysis

#### Relapse-Related Mortality:

- Deaths from disease relapse or progression
- Excludes all transplant-related complications

#### Acute GVHD Grade II-IV:

- Clinically significant acute GVHD (Grades II, III, IV)
- Excludes Grade I and no acute GVHD

#### Chronic GVHD:

- **Total/Any:** Any chronic GVHD regardless of severity
- **Mild:** Limited/mild chronic GVHD
- **Moderate-Severe:** Moderate or severe chronic GVHD requiring treatment

### Calculation Functions

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## **Overall Survival (OS) - Cumulative 2025**

### **Cohort Characteristics**

Table 1: Cohort Characteristics - All 2025 Transplants

Characteristic	Value
Total Patients	26
Deaths	1
Alive	25
Median Age	58
Male/Female	12/14
Complete Remission	20
Not in Complete Remission	6
Median Follow-up (days)	169

### **Overall Survival - All Patients**

Table 2: Overall Survival at Key Timepoints - Cumulative 2025

Timepoint	N	Deaths	Alive	Overall Survival (n/N %)
Day 30	26	1	25	25/26 (96.2%)
Day 100	26	1	25	25/26 (96.2%)
Day 365	26	1	25	25/26 (96.2%)

### **Overall Survival by Complete Remission Status**

Table 3: Overall Survival by Complete Remission Status - Cumulative 2025

Disease Status	N	Day 30		Day 100		Day 365	
		Deaths	OS (n/N %)	Deaths	OS (n/N %)	Deaths	OS (n/N %)
Complete Remission	20	1	19/20 (95%)	1	19/20 (95%)	1	19/20 (95%)
Not in Complete Remission	6	0	6/6 (100%)	0	6/6 (100%)	0	6/6 (100%)

### **Overall Survival by Donor Type**

Table 4: Overall Survival by Donor Type - Cumulative 2025

Donor Type	N	Day 30		Day 100		Day 365	
		Deaths	OS (n/N %)	Deaths	OS (n/N %)	Deaths	OS (n/N %)
MUD	9	0	9/9 (100%)	0	9/9 (100%)	0	9/9 (100%)
MMUD	7	0	7/7 (100%)	0	7/7 (100%)	0	7/7 (100%)
Haploididential	8	1	7/8 (87.5%)	1	7/8 (87.5%)	1	7/8 (87.5%)
Sibling HLA-identical	2	0	2/2 (100%)	0	2/2 (100%)	0	2/2 (100%)

### Overall Survival by Donor Type and Complete Remission Status

#### Complete Remission Patients

Table 5: Overall Survival by Donor Type (Complete Remission Only) - Cumulative 2025

Donor Type	N	Day 30		Day 100		Day 365	
		Deaths	OS (n/N %)	Deaths	OS (n/N %)	Deaths	OS (n/N %)
MUD	7	0	7/7 (100%)	0	7/7 (100%)	0	7/7 (100%)
MMUD	5	0	5/5 (100%)	0	5/5 (100%)	0	5/5 (100%)
Haploididential	8	1	7/8 (87.5%)	1	7/8 (87.5%)	1	7/8 (87.5%)

#### Not in Complete Remission Patients

Table 6: Overall Survival by Donor Type (Not in Complete Remission Only) - Cumulative 2025

Donor Type	N	Day 30		Day 100		Day 365	
		Deaths	OS (n/N %)	Deaths	OS (n/N %)	Deaths	OS (n/N %)
MUD	2	0	2/2 (100%)	0	2/2 (100%)	0	2/2 (100%)
MMUD	2	0	2/2 (100%)	0	2/2 (100%)	0	2/2 (100%)
Sibling HLA-identical	2	0	2/2 (100%)	0	2/2 (100%)	0	2/2 (100%)

## Mortality Endpoints - Cumulative 2025

### Non-Relapse Mortality (NRM)

#### NRM - All Patients

Table 7: Non-Relapse Mortality at Key Timepoints - Cumulative 2025

Timepoint	N	NRM Events	NRM Rate (n/N %)
Day 30	26	1	1/26 (3.8%)
Day 100	26	1	1/26 (3.8%)
Day 365	26	1	1/26 (3.8%)

#### NRM by Complete Remission Status

Table 8: Non-Relapse Mortality by Complete Remission Status - Cumulative 2025

Disease Status	N	Day 30		Day 100		Events	N
		Events	NRM Rate (n/N %)	Events	NRM Rate (n/N %)		
Complete Remission	20	1	1/20 (5%)			1	1/20 (5%)
Not in Complete Remission	6	0	0/6 (0%)			0	0/6 (0%)

#### NRM by Donor Type

Table 9: Non-Relapse Mortality by Donor Type - Cumulative 2025

Donor Type	N	Day 30		Day 100		Day 365	
		Events	NRM Rate (n/N %)	Events	NRM Rate (n/N %)	Events	NRM Rate (n/N %)
MUD	9	0	0/9 (0%)			0	0/9 (0%)
MMUD	7	0	0/7 (0%)			0	0/7 (0%)
Sibling HLA-identical	2	0	0/2 (0%)			0	0/2 (0%)

#### NRM by Donor Type and CR Status

Table 10: Non-Relapse Mortality by Donor Type and Complete Remission Status 2025

CR Status	Donor Type	N	Day 30		Day 100	
			Events	NRM Rate (n/N %)	Events	NRM Rate
Complete Remission	MUD	7	0	0/7 (0%)	0	0/7 (0%)
Complete Remission	MMUD	5	0	0/5 (0%)	0	0/5 (0%)
Complete Remission	Haploididential	8	1	1/8 (12.5%)	1	1/8 (12.5%)
Not in Complete Remission	MUD	2	0	0/2 (0%)	0	0/2 (0%)
Not in Complete Remission	MMUD	2	0	0/2 (0%)	0	0/2 (0%)
Not in Complete Remission	Sibling HLA-identical	2	0	0/2 (0%)	0	0/2 (0%)

### Transplant-Related Mortality (TRM)

**i** Note

TRM is equivalent to NRM in this analysis. Both represent deaths from transplant complications rather than disease relapse.

### TRM - All Patients

Table 11: Transplant-Related Mortality at Key Timepoints - Cumulative 2025

Timepoint	N	TRM Events	TRM Rate (n/N %)
Day 30	26	1	1/26 (3.8%)
Day 100	26	1	1/26 (3.8%)
Day 365	26	1	1/26 (3.8%)

### TRM by Complete Remission Status

Table 12: Transplant-Related Mortality by Complete Remission Status - Cumulative 2025

Disease Status	N	Day 30		Day 100		T
		Events	TRM Rate (n/N %)	Events	TRM Rate (n/N %)	
Complete Remission	20	1	1/20 (5%)	1	1/20 (5%)	1
Not in Complete Remission	6	0	0/6 (0%)	0	0/6 (0%)	0

## TRM by Donor Type

Table 13: Transplant-Related Mortality by Donor Type - Cumulative 2025

Donor Type	N	Day 30		Day 100		Day 365	
		Events	TRM Rate (n/N %)	Events	TRM Rate (n/N %)	Events	TRM Rate (n/N %)
MUD	9	0	0/9 (0%)	0	0/9 (0%)	0	0/9 (0%)
MMUD	7	0	0/7 (0%)	0	0/7 (0%)	0	0/7 (0%)
Sibling HLA-identical	2	0	0/2 (0%)	0	0/2 (0%)	0	0/2 (0%)

## TRM by Donor Type and CR Status

Table 14: Transplant-Related Mortality by Donor Type and Complete Remission - Cumulative 2025

CR Status	Donor Type	N	Day 30		Day 100	
			Events	TRM Rate (n/N %)	Events	TRM Rate (n/N %)
Complete Remission	MUD	7	0	0/7 (0%)	0	0/7 (0%)
Complete Remission	MMUD	5	0	0/5 (0%)	0	0/5 (0%)
Complete Remission	Haploididential	8	1	1/8 (12.5%)	1	1/8 (12.5%)
Not in Complete Remission	MUD	2	0	0/2 (0%)	0	0/2 (0%)
Not in Complete Remission	MMUD	2	0	0/2 (0%)	0	0/2 (0%)
Not in Complete Remission	Sibling HLA-identical	2	0	0/2 (0%)	0	0/2 (0%)

## Relapse-Related Mortality

### Relapse Mortality - All Patients

Table 15: Relapse-Related Mortality at Key Timepoints - Cumulative 2025

Timepoint	N	Relapse Deaths	Relapse Mortality (n/N %)
Day 30	26	0	0/26 (0%)
Day 100	26	0	0/26 (0%)
Day 365	26	0	0/26 (0%)

## Relapse Mortality by Complete Remission Status

Table 16: Relapse-Related Mortality by Complete Remission Status - Cumulative

Disease Status	N	Day 30		Day 100	
		Events	Relapse Mortality (n/N %)	Events	Relapse Mortality (n/N %)
Complete Remission	20	0	0/20 (0%)	0	0/20 (0%)
Not in Complete Remission	6	0	0/6 (0%)	0	0/6 (0%)

## Relapse Mortality by Donor Type

Table 17: Relapse-Related Mortality by Donor Type - Cumulative 2025

Donor Type	N	Day 30		Day 100		Events
		Events	Relapse Mortality (n/N %)	Events	Relapse Mortality (n/N %)	
MUD	9	0	0/9 (0%)	0	0/9 (0%)	0
MMUD	7	0	0/7 (0%)	0	0/7 (0%)	0
Sibling HLA-identical	2	0	0/2 (0%)	0	0/2 (0%)	0

## Relapse Mortality by Donor Type and CR Status

Table 18: Relapse-Related Mortality by Donor Type and Complete Remission Status - Cumulative 2025

CR Status	Donor Type	N	Day 30		Events	Relapse Mortality (n/N %)
			Events	Relapse Mortality (n/N %)		
Complete Remission	MUD	7	0	0/7 (0%)	0	0/7 (0%)
Complete Remission	MMUD	5	0	0/5 (0%)	0	0/5 (0%)
Complete Remission	Haploidentical	8	0	0/8 (0%)	0	0/8 (0%)
Not in Complete Remission	MUD	2	0	0/2 (0%)	0	0/2 (0%)
Not in Complete Remission	MMUD	2	0	0/2 (0%)	0	0/2 (0%)
Not in Complete Remission	Sibling HLA-identical	2	0	0/2 (0%)	0	0/2 (0%)

## **GVHD Endpoints - Cumulative 2025**

### **Acute GVHD Grade II-IV**

#### **Acute GVHD - All Patients**

Table 19: Acute GVHD Grade II-IV - Cumulative 2025

Metric	Value
Total Patients	26
Acute GVHD II-IV Events	7
Acute GVHD II-IV Rate	7/26 (26.9%)

#### **Acute GVHD by Complete Remission Status**

Table 20: Acute GVHD Grade II-IV by Complete Remission Status - Cumulative 2025

Disease Status	N	Events	Acute GVHD II-IV Rate (n/N %)
Complete Remission	20	7	7/20 (35%)
Not in Complete Remission	6	0	0/6 (0%)

#### **Acute GVHD by Donor Type**

Table 21: Acute GVHD Grade II-IV by Donor Type - Cumulative 2025

Donor Type	N	Events	Acute GVHD II-IV Rate (n/N %)
MUD	9	1	1/9 (11.1%)
MMUD	7	1	1/7 (14.3%)
Sibling HLA-identical	2	0	0/2 (0%)

#### **Acute GVHD by Donor Type and CR Status**

Table 22: Acute GVHD Grade II-IV by Donor Type and Complete Remission Status - Cumulative 2025

CR Status	Donor Type	N	Events	Acute GVHD II-IV Rate (n/N %)
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Complete Remission	MUD	7	1	1/7 (14.3%)
Complete Remission	MMUD	5	1	1/5 (20%)
Complete Remission	Haploididential	8	5	5/8 (62.5%)
Not in Complete Remission	MUD	2	0	0/2 (0%)
Not in Complete Remission	MMUD	2	0	0/2 (0%)
Not in Complete Remission	Sibling HLA-identical	2	0	0/2 (0%)

### Chronic GVHD (Total/Any)

#### Chronic GVHD (Any) - All Patients

Table 23: Chronic GVHD (Any) - Cumulative 2025

Metric	Value
Total Patients	26
Chronic GVHD (Any) Events	NA
Chronic GVHD (Any) Rate	NA/26 (NA%)

#### Chronic GVHD (Any) by Complete Remission Status

Table 24: Chronic GVHD (Any) by Complete Remission Status - Cumulative 2025

Disease Status	N	Events	Chronic GVHD (Any) Rate (n/N %)
Complete Remission	20	NA	NA/20 (NA%)
Not in Complete Remission	6	NA	NA/6 (NA%)

#### Chronic GVHD (Any) by Donor Type

Table 25: Chronic GVHD (Any) by Donor Type - Cumulative 2025

Donor Type	N	Events	Chronic GVHD (Any) Rate (n/N %)
MUD	9	NA	NA/9 (NA%)
MMUD	7	NA	NA/7 (NA%)
Sibling HLA-identical	2	1	1/2 (50%)

## **Chronic GVHD (Any) by Donor Type and CR Status**

Table 26: Chronic GVHD (Any) by Donor Type and Complete Remission Status - Cumulative 2025

CR Status	Donor Type	N	Events	Chronic GVHD (Any) Rate (n/N %)
Complete Remission	MUD	7	NA	NA/7 (NA%)
Complete Remission	MMUD	5	NA	NA/5 (NA%)
Complete Remission	Haploididential	8	NA	NA/8 (NA%)
Not in Complete Remission	MUD	2	NA	NA/2 (NA%)
Not in Complete Remission	MMUD	2	NA	NA/2 (NA%)
Not in Complete Remission	Sibling HLA-identical	2	1	1/2 (50%)

## **Chronic GVHD (Mild)**

### **Chronic GVHD (Mild) - All Patients**

Table 27: Chronic GVHD (Mild) - Cumulative 2025

Metric	Value
Total Patients	26
Chronic GVHD (Mild) Events	1
Chronic GVHD (Mild) Rate	1/26 (3.8%)

### **Chronic GVHD (Mild) by Complete Remission Status**

Table 28: Chronic GVHD (Mild) by Complete Remission Status - Cumulative 2025

Disease Status	N	Events	Chronic GVHD (Mild) Rate (n/N %)
Complete Remission	20	1	1/20 (5%)
Not in Complete Remission	6	0	0/6 (0%)

### **Chronic GVHD (Mild) by Donor Type**

Table 29: Chronic GVHD (Mild) by Donor Type - Cumulative 2025

Donor Type	N	Events	Chronic GVHD (Mild) Rate (n/N %)
MUD	9	0	0/9 (0%)
MMUD	7	0	0/7 (0%)
Sibling HLA-identical	2	0	0/2 (0%)

### Chronic GVHD (Mild) by Donor Type and CR Status

Table 30: Chronic GVHD (Mild) by Donor Type and Complete Remission Status - Cumulative 2025

CR Status	Donor Type	N	Events	Chronic GVHD (Mild) Rate (n/N %)
Complete Remission	MUD	7	0	0/7 (0%)
Complete Remission	MMUD	5	0	0/5 (0%)
Complete Remission	Haploididential	8	1	1/8 (12.5%)
Not in Complete Remission	MUD	2	0	0/2 (0%)
Not in Complete Remission	MMUD	2	0	0/2 (0%)
Not in Complete Remission	Sibling HLA-identical	2	0	0/2 (0%)

### Chronic GVHD (Moderate-Severe)

#### Chronic GVHD (Moderate-Severe) - All Patients

Table 31: Chronic GVHD (Moderate-Severe) - Cumulative 2025

Metric	Value
Total Patients	26
Chronic GVHD (Mod-Severe) Events	4
Chronic GVHD (Mod-Severe) Rate	4/26 (15.4%)

#### Chronic GVHD (Moderate-Severe) by Complete Remission Status

Table 32: Chronic GVHD (Moderate-Severe) by Complete Remission Status - Cumulative 2025

Disease Status	N	Events	Chronic GVHD (Mod-Severe) Rate (n/N %)
Complete Remission	20	3	3/20 (15%)
Not in Complete Remission	6	1	1/6 (16.7%)

### **Chronic GVHD (Moderate-Severe) by Donor Type**

Table 33: Chronic GVHD (Moderate-Severe) by Donor Type - Cumulative 2025

Donor Type	N	Events	Chronic GVHD (Mod-Severe) Rate (n/N %)
MUD	9	1	1/9 (11.1%)
MMUD	7	0	0/7 (0%)
Sibling HLA-identical	2	1	1/2 (50%)

### **Chronic GVHD (Moderate-Severe) by Donor Type and CR Status**

Table 34: Chronic GVHD (Moderate-Severe) by Donor Type and Complete Remission Status - Cumulative 2025

CR Status	Donor Type	N	Events	Chronic GVHD (Mod-Severe) Rate (n/N %)
Complete Remission	MUD	7	1	1/7 (14.3%)
Complete Remission	MMUD	5	0	0/5 (0%)
Complete Remission	Haploididential	8	2	2/8 (25%)
Not in Complete Remission	MUD	2	0	0/2 (0%)
Not in Complete Remission	MMUD	2	0	0/2 (0%)
Not in Complete Remission	Sibling HLA-identical	2	1	1/2 (50%)

## **Summary and Key Findings**

### **Comprehensive Endpoint Summary**

Table 35: Comprehensive Endpoint Summary - Cumulative 2025 (N=26)

Category	Endpoint	Count	Rate
<b>Overall Survival</b>			
Overall Survival	OS at Day 30	25 alive	96.2%
Overall Survival	OS at Day 100	25 alive	96.2%
Overall Survival	OS at Day 365	25 alive	96.2%
<b>Non-Relapse Mortality (NRM/TRM)</b>			
Mortality - NRM/TRM	NRM/TRM at Day 30	1 events	3.8%

Mortality - NRM/TRM	NRM/TRM at Day 100	1 events	3.8%
Mortality - NRM/TRM	NRM/TRM at Day 365	1 events	3.8%
<b>Relapse-Related Mortality</b>			
Mortality - Relapse	Relapse Death at Day 30	0 events	0%
Mortality - Relapse	Relapse Death at Day 100	0 events	0%
Mortality - Relapse	Relapse Death at Day 365	0 events	0%
<b>GVHD Endpoints</b>			
GVHD - Acute II-IV	Acute GVHD Grade II-IV	7 events	26.9%
GVHD - Chronic (Any)	Chronic GVHD (Total)	NA events	NA%
GVHD - Chronic (Mild)	Chronic GVHD (Mild)	1 events	3.8%
GVHD - Chronic (Mod-Severe)	Chronic GVHD (Mod-Severe)	4 events	15.4%

## Key Observations

### \*\*Overall Survival:\*\*

- Day 30 OS: 96.2%
- Day 100 OS: 96.2%
- Day 365 OS: 96.2%

### \*\*Mortality Endpoints:\*\*

- NRM/TRM Events: 1 (3.8%)
- Relapse Deaths: 0 (0%)
- Total Deaths: 1 (3.8%)

### \*\*GVHD Endpoints:\*\*

- Acute GVHD Grade II-IV: 7 (26.9%)
- Chronic GVHD (Any): NA (NA%)
- Chronic GVHD (Mild): 1 (3.8%)
- Chronic GVHD (Moderate-Severe): 4 (15.4%)

## ! Important Limitations

### Limited Follow-up Period:

- Cohort includes all 2025 transplants with varying follow-up times
- Median follow-up: 169 days
- Q1 patients: Longest follow-up (up to ~12 months)
- Q4 patients: Minimal follow-up (1-3 months)

### Interpretation Considerations:

- **Early endpoints (Day 30, Day 100):** More reliable across all patients
- **One-year endpoints (Day 365):** Should be interpreted with caution
  - Not all patients have reached 365 days post-transplant
  - True rates may be underestimated
- **Chronic GVHD rates:** Likely underestimated
  - Chronic GVHD typically manifests 3-12+ months post-transplant
  - Q3 and Q4 patients have insufficient follow-up time
- **Longer follow-up needed:** For definitive assessment of long-term outcomes

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*Report generated on January 21, 2026*

*This cumulative analysis includes all patients transplanted during calendar year 2025 (N=26)*

*Analysis covers: Overall Survival, Non-Relapse Mortality, Transplant-Related Mortality, Relapse-Related Mortality, and GVHD endpoints*