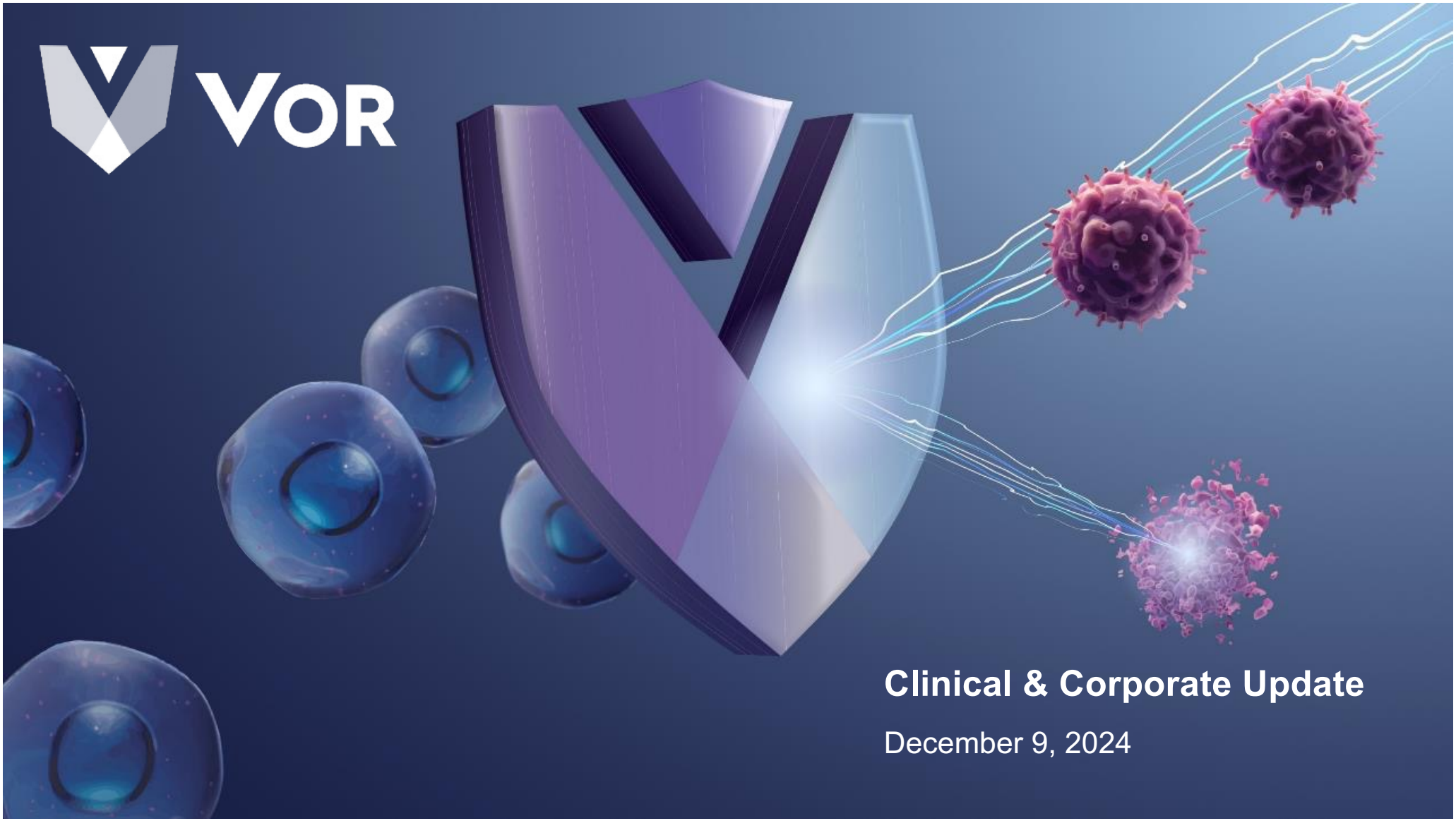
VOR
Clinical & Corporate Update
December 9, 2024

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Today's Agenda

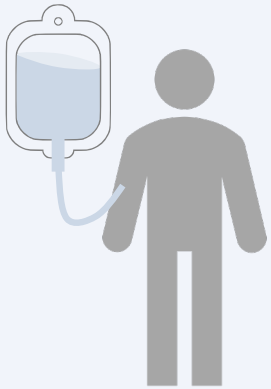
Agenda	Speaker
Introductory Remarks	Robert Ang, MBBS, MBA, President & CEO
VBP101 Clinical Update and Regulatory Update	Eyal Attar, MD, Chief Medical Officer
Closing Remarks	Robert Ang, MBBS, MBA, President & CEO
Perspective on VBP101	Guenther Koehne, MD, PhD, Deputy Director and Chief of Blood & Marrow Transplant and Hematologic Oncology at Miami Cancer Institute of Baptist Health South Florida
Q&A	Robert Ang, MBBS, President & CEO Eyal Attar, MD, Chief Medical Officer Han Choi, MD, LLM, Chief Financial Officer Guenther Koehne, MD, PhD

Introductory Remarks

Robert Ang, MBBS, MBA, President & CEO

Even After Transplant, High-Risk AML Has Poor Outcomes

Transplant

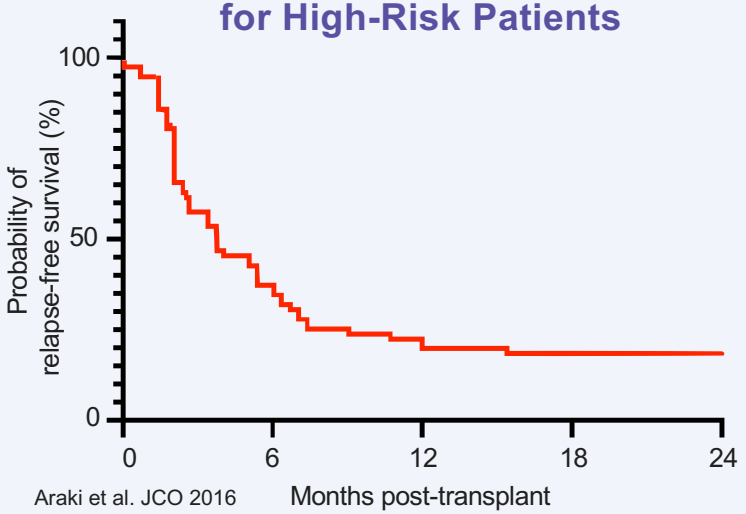


A mainstay treatment

After Transplant

Maintenance therapy unfeasible due to drug toxicity

Watchful Waiting Outcomes for High-Risk Patients



Araki et al. JCO 2016

Frequent leukemia relapses and death, poor outcomes

What If Shielding Could Lead to Improved Outcomes?

A shielded graft…

… could shield a blood system…

…enabling use of otherwise toxic maintenance therapies…

ADC

CAR-T

…potentially leading to improved outcomes

Required Shielded Graft Attributes

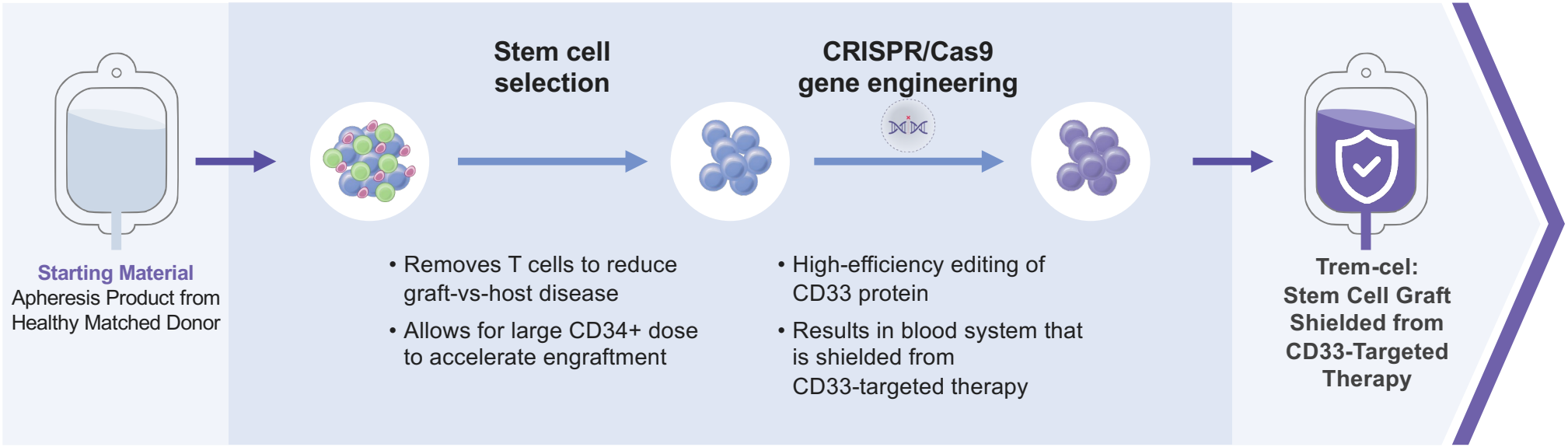
Engraftment
Reliably reconstitute the blood system

Therapeutic Index
Optimize efficacy and safety of maintenance therapies

Shielding
Protect against otherwise toxic therapies

Patient Benefit
Prolong relapse-free survival

What is Trem-Cel?



~7 day manufacturing process

VBP101 Clinical Update

Eyal Attar, MD, Chief Medical Officer

VBP101: Trem-cel Phase 1/2a Clinical Trial

Patient Journey

Transplant-eligible AML and MDS patients at high risk of relapse

Transplant Decision

Consolidation/Salvage

Conditioning

Trem-cel Infusion

Engraftment

Maintenance Mylotarg

Starting ~day 60 up to 8 cycles
Dose escalation 0.5-2 mg/m²

No delay in typical patient transplant process

Engraftment

Shielding

Therapeutic Index

Patient Benefit

Donor Journey

Screening

Stem Cell Mobilization, Collection

Related

Unrelated

Trem-cel Manufacturing
~7-day process

Unedited back-up graft

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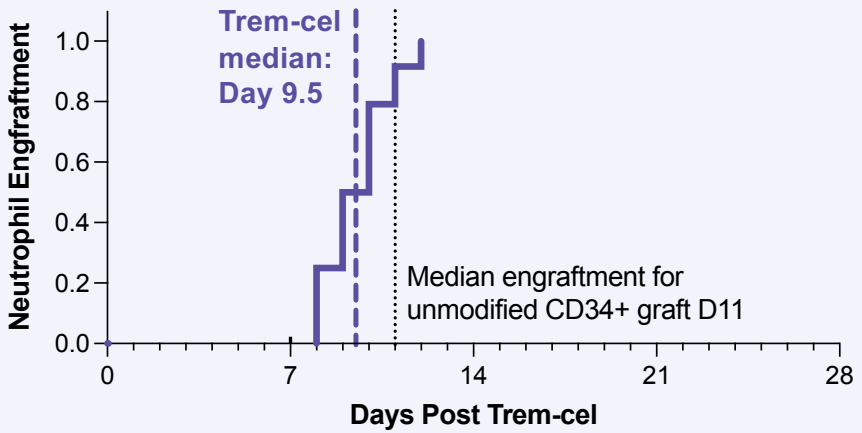
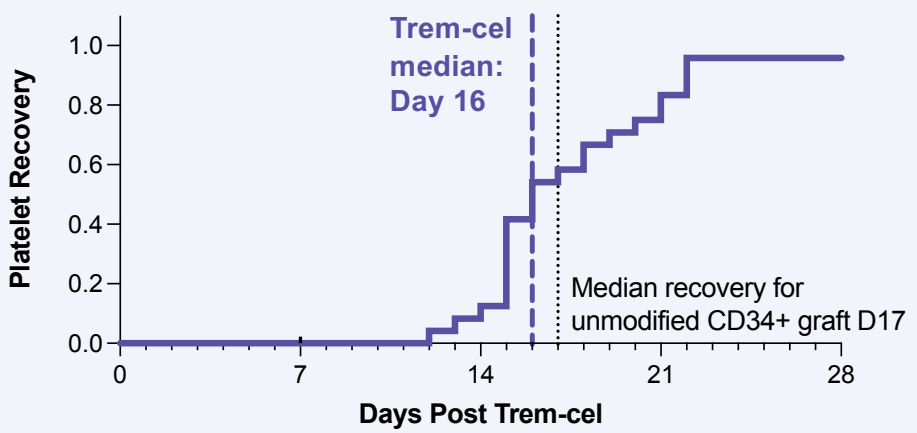
Trem-cel Achieved Timely Engraftment

Neutrophil Engraftment (n=25)



Platelet Engraftment (n=25)



- High CD33 editing efficiency (median 90%, range 71-94%)
- 100% neutrophil engraftment
- 100% achieved full myeloid chimerism at D28

Data cut-off: 1-NOV-2024

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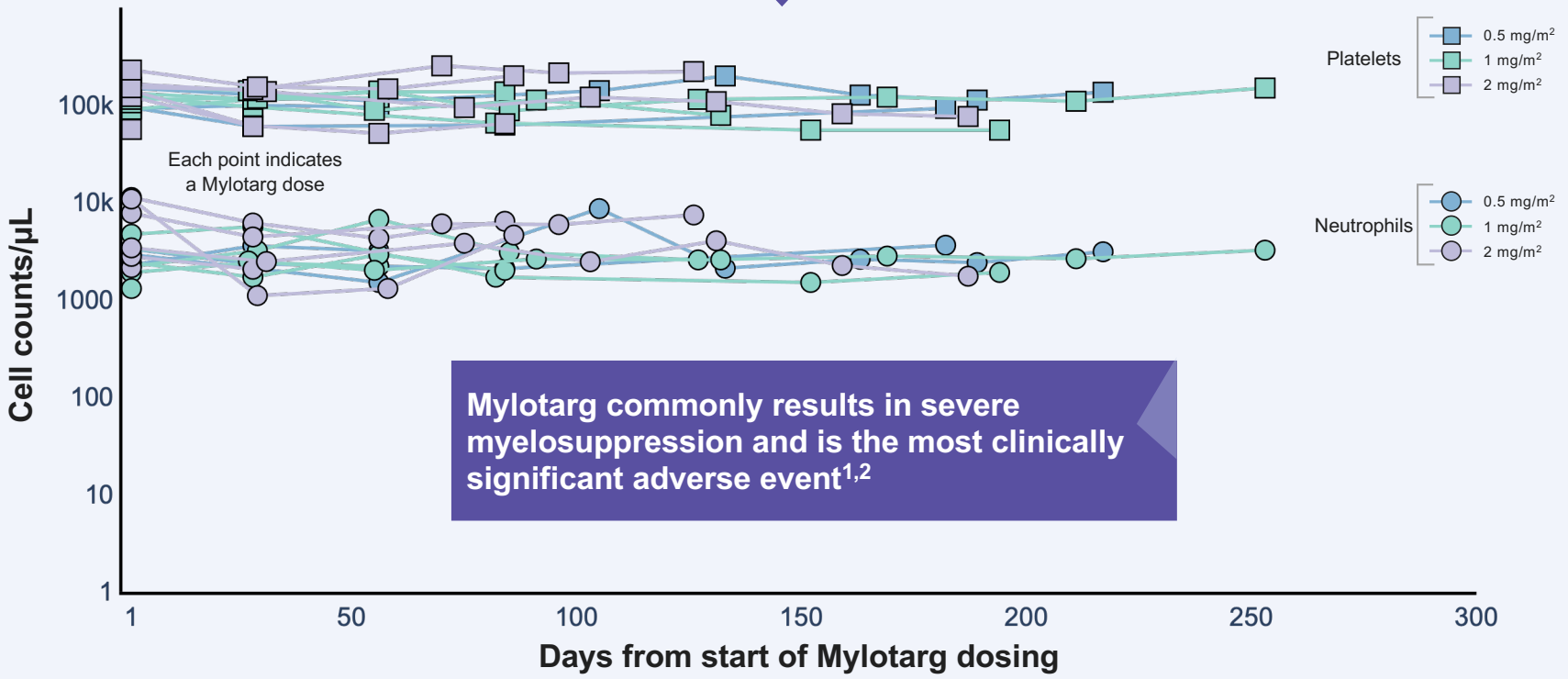
Trem-cel Demonstrated Shielding Across Mylotarg Doses

Neutrophil and Platelet Peripheral Blood Counts with Mylotarg Doses

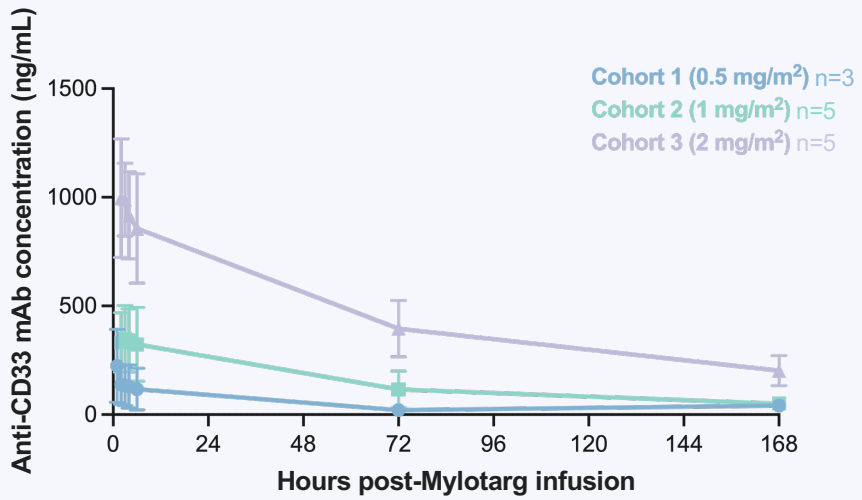


Mylotarg commonly results in severe myelosuppression and is the most clinically significant adverse event[1,2]

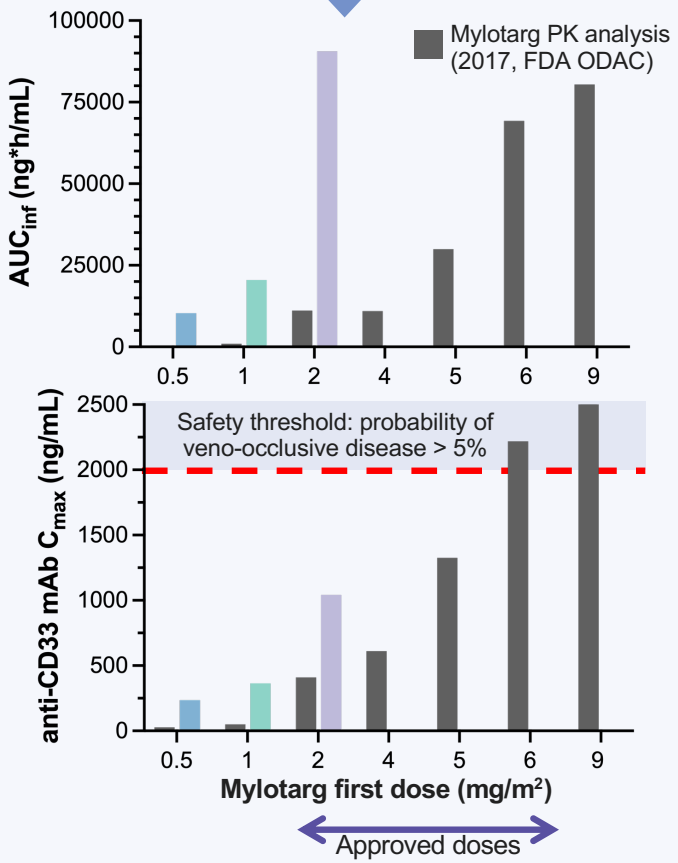
1. Sievers et al. Blood 1999 2. Mylotarg prescribing information
Data cut-off: 1-NOV-2024

Trem-cel Enabled Broadened Therapeutic Index for Mylotarg

Mylotarg Pharmacokinetic Profile



C_{max} and AUC Across Mylotarg Doses



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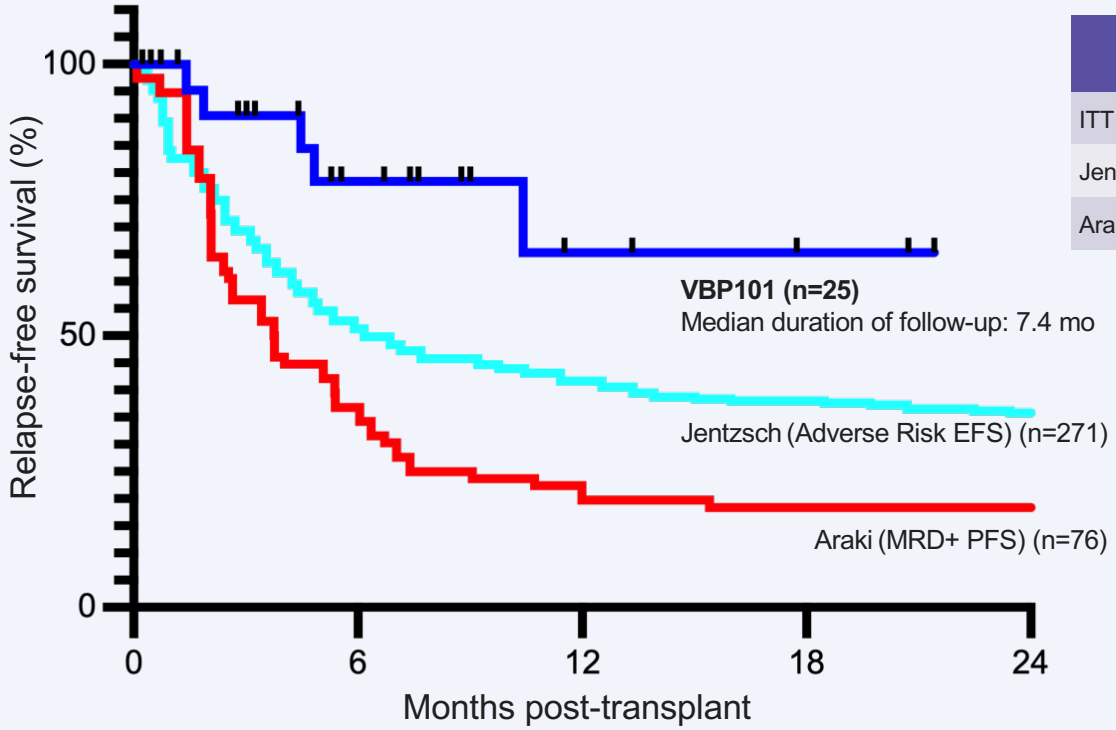
Baseline Risk Factor Demographics for AML Patients: VBP101 vs. Comparators

Disease Characteristic	VBP101 AML ITT (n=24)	VBP101 AML Treated with Mylotarg (n=15)	Araki MRD+ Cohort (2016) (n=76)	Jentzsch Adverse Risk Cohort (2022) (n=271)
Cytogenetics Risk ELN 2022				
Favorable	8%	13%	3%	N/A
Intermediate	33%	27%	58%	N/A
Adverse	58%	60%	39%**	100%*
Other AML Risk Factors				
TP53 mutation	33%	40%	NR	NR
Secondary AML[a]	42%	33%	42%	49%
Disease Burden Status				
Remission (MRDneg)	75%	73%	N/A	20%
MRD+ (>0.1-<5% blasts by flow)	13%	20%	100%*	13%
Active disease (≥5% blasts)	13%	7%	N/A	32%***
AML Disease Status				
CR1	63%	60%	67%	61%
CR2	25%	33%	33%	7%
Relapsed or refractory	13%	7%	0	32%***
Adverse Risk Features (Adverse ELN/molecular/cytogenetic, Secondary AML, MRD or active disease, CR2 or Relapsed/Refractory), n (%)				
1	11 (46%)	6 (40%)		
2 or more	13 (54%)	9 (60%)		

*Selected comparison cohort (n) from published studies. **Adverse cytogenetics. ***Includes partial remission, relapsed, refractory. Jentzsch values for disease burden status do not total 100% due to data not reported.
[a]Defined as AML with myelodysplasia-related change and therapy-related AML, NR=not reported, N/A=not applicable
Data cut-off: 01-NOV-2024

Trem-cel+Mylotarg RFS Appears Favorable vs Published High-Risk AML Comparators

Relapse-Free Survival of VBP101 (intention-to-treat) vs Araki and Jentzsch (historical controls)

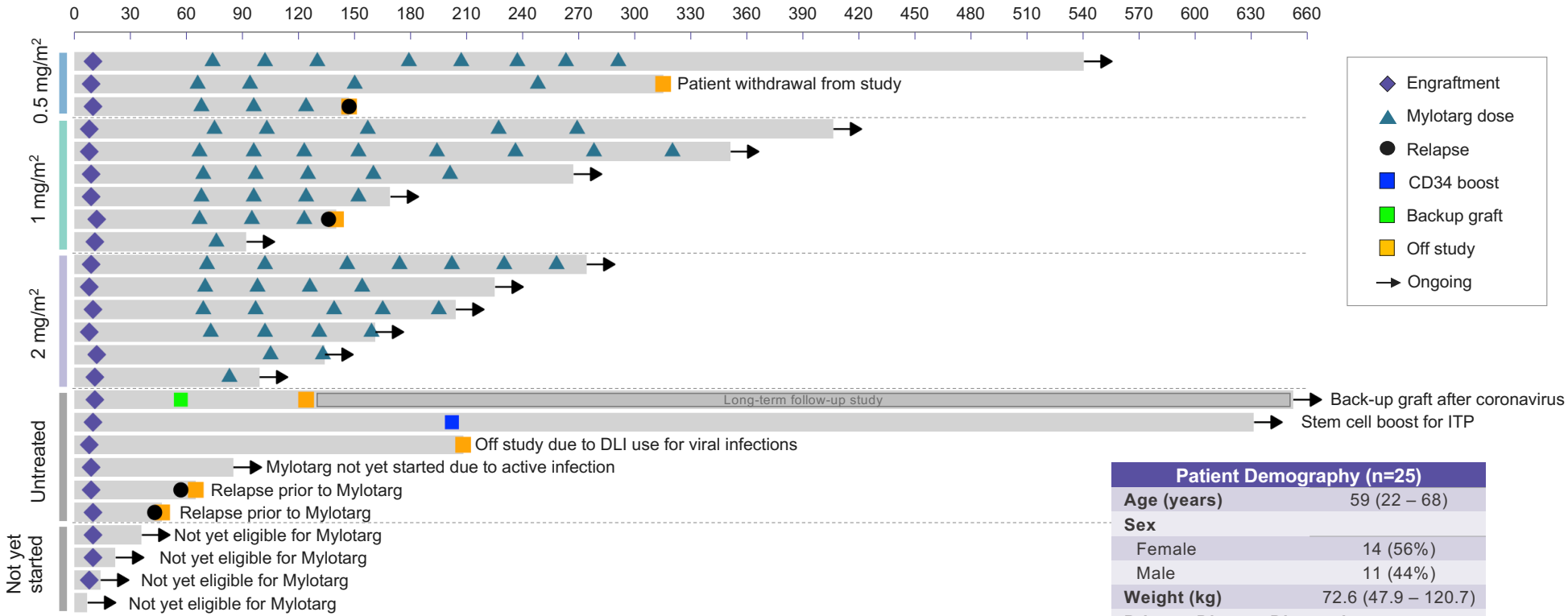


	Median RFS (mo)	P value vs VBP101*	Hazard Ratio* (HR)	HR 95% CI*
ITT	Not reached			
Jentzsch	6.2	0.02	0.36	0.21-0.64
Araki	3.8	0.0004	0.23	0.14-0.40

- Four relapses observed: (all CD33 positive at relapse)
  - 2/4 relapsed prior to Mylotarg treatment
  - 3/4 transplanted with active disease; 1/4 with MRD
  - 4/4 adverse risk cytogenetics
- One patient died off-study due to complications of viral infection

VBP101 data cut-off: 1-NOV-2024. Adapted from Fig 2B MRD+ PFS line from Araki et al. JCO 2016; Adapted from Fig 1C, ELN 2022 Adverse risk EFS line from Jentzsch et al. Blood Cancer Journal 2022. * = individual comparison to VBP101 using log-rank Mantel-Cox test. Data not from head-to-head trial.

Low Rate of Relapse (2/15) Among Patients Receiving Mylotarg



Patient Demography (n=25)	
Age (years)	59 (22 – 68)
Sex	
Female	14 (56%)
Male	11 (44%)
Weight (kg)	72.6 (47.9 – 120.7)
Primary Disease Diagnosis	
AML	24 (96%)
MDS	1 (4%)

ITP: idiopathic thrombocytopenic purpura or similar immune-mediated thrombocytopenia
Data cut-off: 1-NOV-2024

Any Grade Treatment Adverse Events After Receiving Mylotarg (n=15)

Adverse Event	Grade 1	Grade 2	Grade 3	Grade 4
Hematologic				
Anemia	-	1/15 (7%)	3/15 (20%)	-
Autoimmune hemolytic anemia	-	-	1/15 (7%)	-
Leukopenia	-	-	1/15 (7%)	-
Lymphocyte count decreased	1/15 (7%)	-	-	-
Lymphopenia	-	-	1/15 (7%)	-
Neutropenia	-	2/15 (13%)	3/15 (20%)	-
Platelet count decreased	-	-	2/15 (13%)	-
Thrombocytopenia	-	1/15 (7%)	1/15 (7%)	1/15 (7%)[a]
Hepatobiliary				
ALT increased	2/15 (13%)	1/15 (7%)[b]	-	-
AST increased	1/15 (7%)	-	1/15 (7%)[b]	-
Biliary colic	1/15 (7%)	-	-	-
Alk Phos increased	3/15 (20%)	-	-	-
Blood bilirubin increased	1/15 (7%)	-	-	-
LDH increased	2/15 (13%)	-	-	-
Cholecystitis	-	2/15 (13%)	-	-
Veno-occlusive disease	1/15 (7%)[c]	-	-	-

[a]Following adverse event, patient continued to receive multiple cycles of Mylotarg
[b]ALT/AST elevation attributed to fluconazole toxicity and resolved after discontinuation
[c]Mild grade late-onset veno-occlusive disease occurred 97 days after 0.5 mg/m^2 Mylotarg dose. Predisposing factors included azole toxicity, concurrent norovirus infection and gram-negative bacteremia.
ALT = Alanine aminotransferase; AST = Aspartate aminotransferase; Alk Phos = blood alkaline phosphatase; LDH = blood lactate dehydrogenase
Data cut-off: 1-NOV-2024

Clinical Update Summary

- Robust neutrophil engraftment, platelet recovery and full donor myeloid chimerism
- Consistent shielding from Mylotarg-related cytopenias during repeated 0.5, 1, and 2 mg/m^2 doses
- Immune reconstitution, multilineage chimerism, and safety profile similar to unedited CD34-selected grafts
- Broadened Mylotarg therapeutic index following trem-cel
- Preliminary data suggesting improved RFS compared to published groups of AML patients at high risk of relapse post-HCT

Trem-cel + Mylotarg Regulatory Update

Potential Registrational Trial Design for Trem-cel/Mylotarg

Patient Journey

Key Eligibility Criteria

- 18-70 years of age
- 8/8 HLA-matched related or unrelated donor
- Suitable for myeloablative conditioning
- CD33+ AML
- High-risk features:
  - MRD+
  - Adverse genetics
  - 2°AML or AML-MRC

AML (n~80) → Myeloablative conditioning → Trem-cel → 30d or later → Mylotarg (8 cycles)

AML (n~80) → Myeloablative conditioning → Standard of care (T-cell replete) transplant

Potential registrational endpoint: Relapse-free survival (RFS)

Proposed key secondaries:

- GVHD-free RFS
- Overall survival
- cGVHD free survival
- Time to neutrophil engraftment

Summary of FDA Response to Type C Meeting Request

- Agreement that trem-cel engrafts neutrophils and platelets and has a similar safety profile to unedited CD34+ grafts
- Agreement with the trem-cel-Mylotarg registrational clinical trial design with respect to study population, control arm, primary endpoint, stratification factors, and statistical design
- Agreement to provide further updates to FDA from the VBP101 trial alongside submission of the full registrational clinical trial protocol

Closing Remarks

Robert Ang, MBBS, MBA, President & CEO

Vor Bio Unique Approach to Potentially Cure Blood Cancers

Trem-cel, a first-in-class investigational* shielded stem cell transplant

- Reliable engraftment, robust shielding of the blood system
- Platform therapy addressing >$1B potential market opportunity

Trem-cel + Mylotarg combination

- Broadened Mylotarg therapeutic index and early evidence of patient benefit prolonging RFS
- Supportive feedback from FDA on registrational trial design

VCAR33^{ALLO} and VADC45

- Offer multiple additional potential therapeutic options as targeted therapies in AML and in oncology, gene therapy, and autoimmune disorders

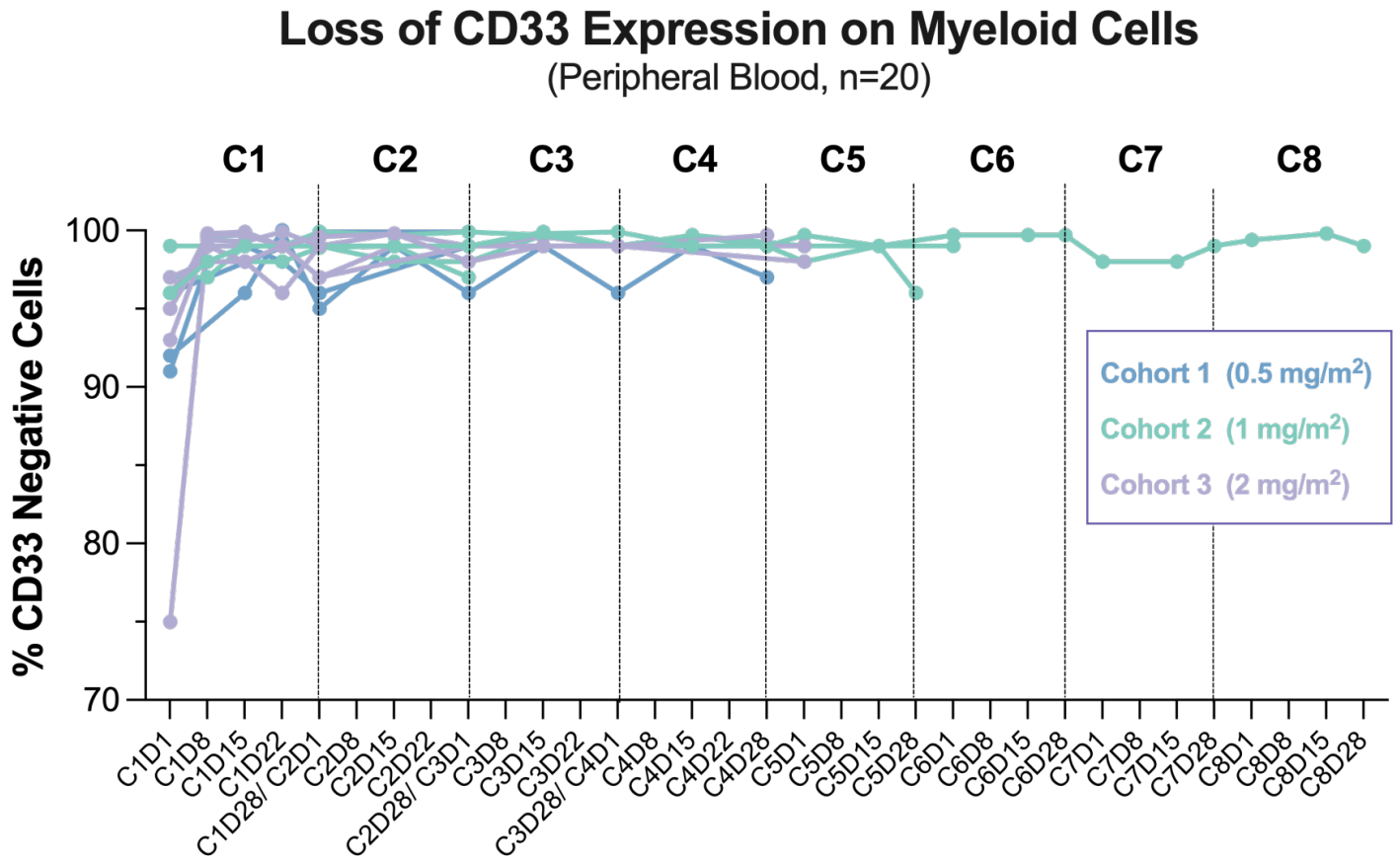
*Potential to be first-in-class if approved

Perspective on VBP101

Guenther Koehne, MD, PhD

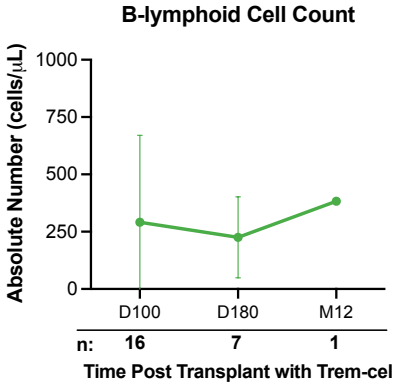
Q&A

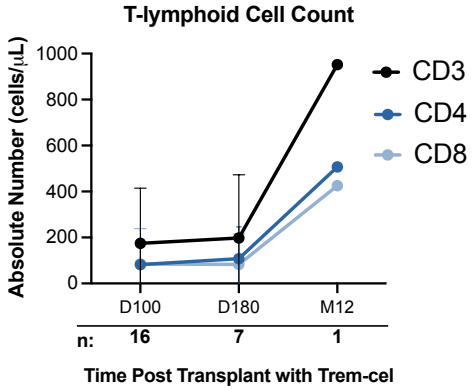
CD33 Negative Cells Enriched with Mylotarg Doses

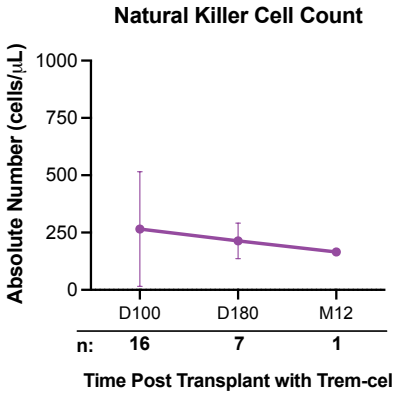


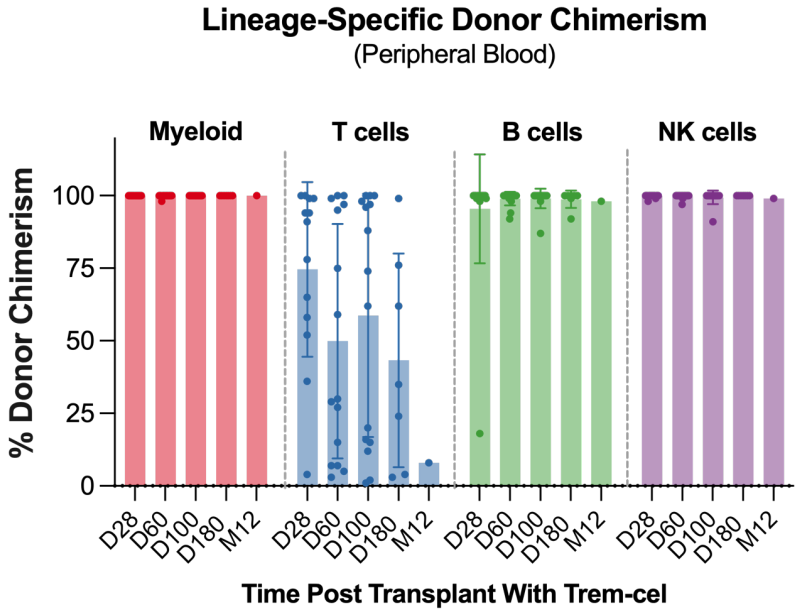
Data cut-off: 1-NOV-2024

Immune Reconstitution, Full and Sustained Myeloid Chimerism, and CD33-negative Myeloid Cells Are Observed









% CD33-Negative Analysis	Drug Product*	D28*	D60*
NGS Gene Editing	**90** (78-94) n=18	**94** (85-98) n=19	**94** (86-97) n=16
Flow Cytometry	N/E	**93** (74-98) n=22	**94** (78-99) n=19

*Mean % (range), Editing and flow data from peripheral blood monocytes and myeloid cells respectively
N/E: not evaluated

Data cut-off: 1-NOV-2024. Reference unedited CD34-selected reconstitution: Goldberg et al Leuk and Lymph 58 (217); Llaurador et al. Transplantation and Cellular Therapy 27 (2021)

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