



HIGH DISEASE-FREE SURVIVAL IN PATIENTS WITH HIGH-RISK MDS TREATED WITH ORCA-T

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INTRODUCTION

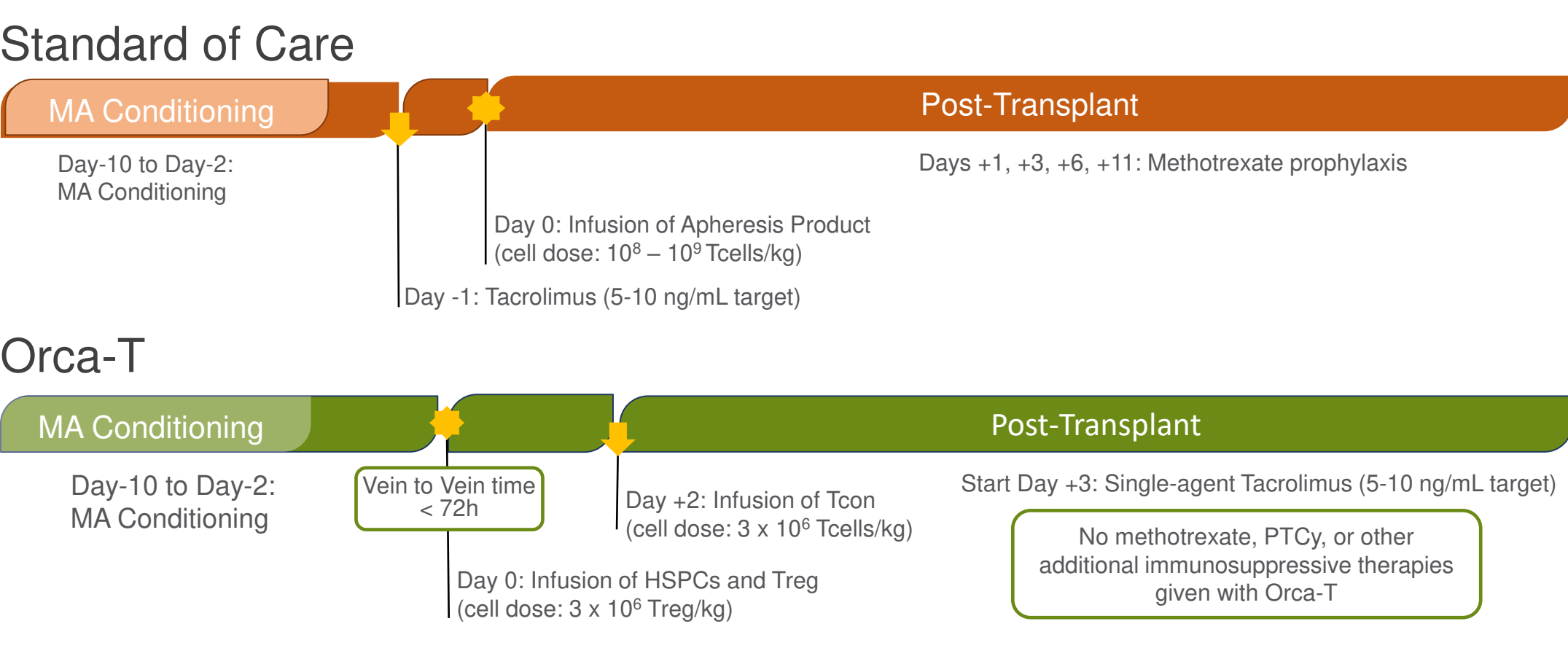
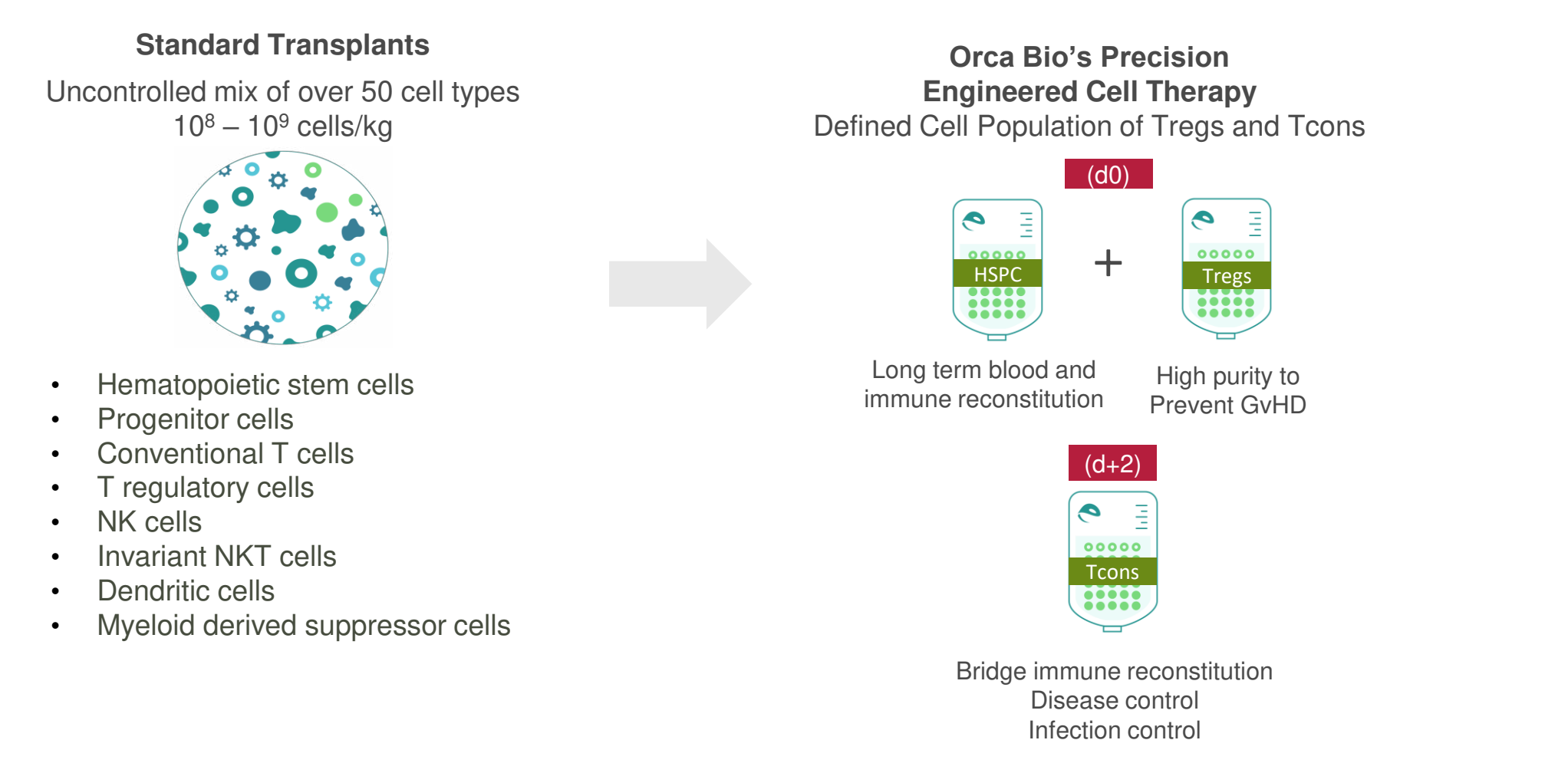
- Allogeneic hematopoietic cell transplant (alloHCT) may be a curative treatment option for patients with myelodysplastic syndrome (MDS).
- Survival after alloHCT for MDS using matched donors is approximately 65% at 1 year, and relapse-free survival at 1 year was ~69% in MDS patients in the RICMAC trial who received myeloablative conditioning (MAC).¹
- The use of investigational therapies that potentially reduce transplant toxicity could improve outcomes in this patient population with difficult-to-treat disease.
- In this phase1b study², we evaluated Orca-T in MDS patients who were eligible for transplant per 2017 International Expert Panel recommendations.

AIM

Our primary objective was to evaluate the efficacy and safety outcomes of the Orca-T allogeneic cell therapy system in transplant-eligible patients with intermediate to high-risk MDS.

METHODS

Orca-T is a high-precision cell therapy biologic that includes stem and immune cells, derived from allogeneic donors, that leverages highly purified, polyclonal donor regulatory T cells to control alloreactive immune responses.



RESULTS

Baseline characteristics (n=16)	
Median age (range) in years	59 (43-65)
Female (%)	56
Median follow-up (range) in months	19.1 (6.3 – 32.2)
IPSS-M prognostic score, n (%)	
Low	1 (6)
Moderate low	1 (6)
Moderate high	3 (19)
High	7 (44)
Very high	4 (25)
Baseline HCT-CI score, n (%)	
0	6 (38)
1	3 (19)
2	2 (13)
3	3 (19)
4	2 (13)
8/8 HLA-Matched Donor Relationship (%)	
Related	7 (44)
Unrelated	9 (56)

* values may not add to exactly 100% due to rounding
Abbreviations: HCT-CI Hematopoietic Cell Transplantation-Specific Comorbidity Index; HLA, human leukocyte antigen; IPSS-M, Molecular International Prognostic Scoring System

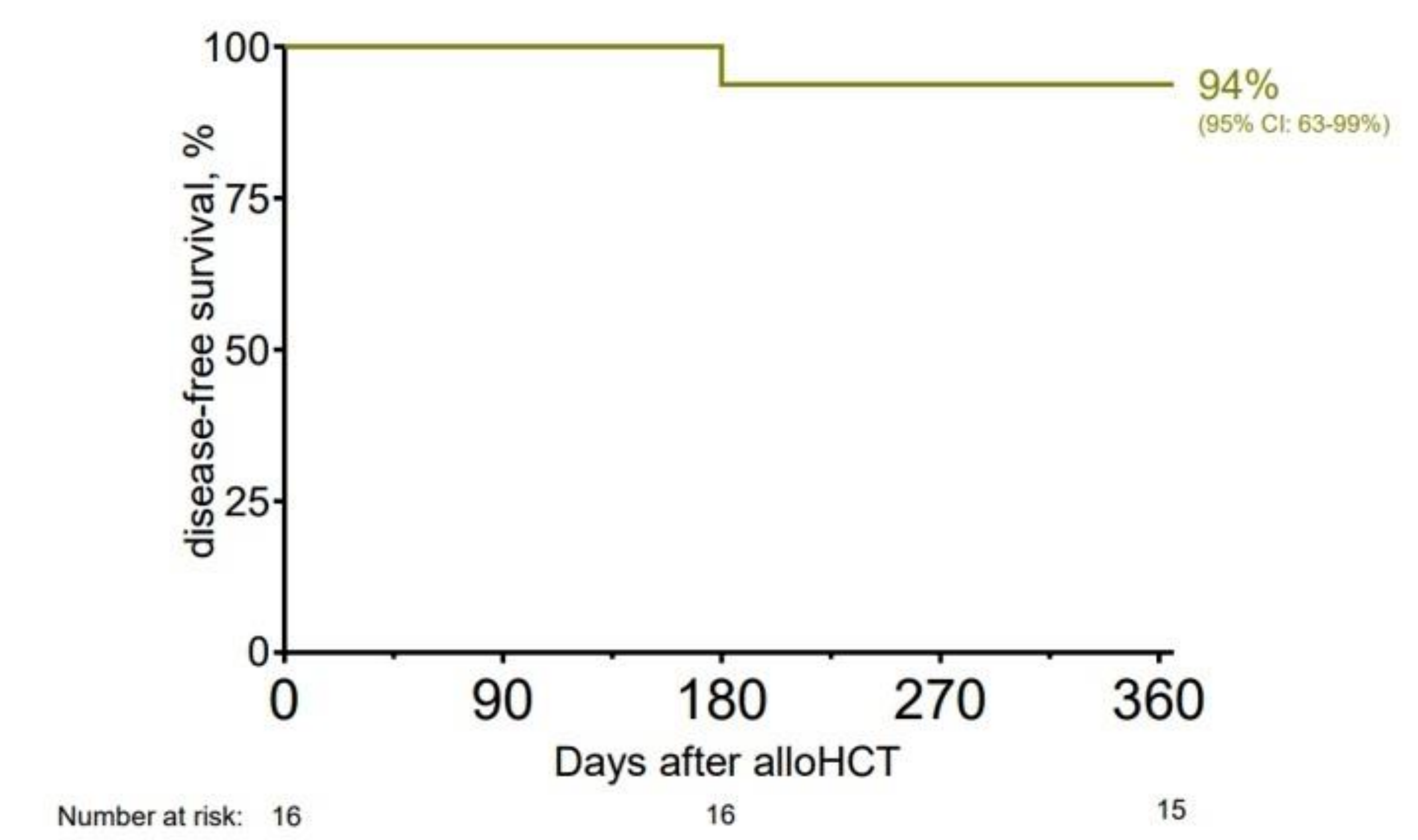
Key Results and Outcomes

- Orca-T was successfully manufactured in a single, centralized GMP manufacturing facility for all patients (n=16).
- Orca-T was distributed and infused throughout the U.S. in < 72 hours vein-to-vein (i.e. time between end of donor apheresis to start of recipient's infusion).
- Disease-free survival (relapse-free survival) at 12 months was 94%.
- At 1 year, no patients had experienced grade ≥ 3 acute GvHD. Moderate to severe chronic GvHD had occurred in 2 patients.
- Modified GRFS (survival free of Grade 3-4 acute GvHD, moderate-to-severe chronic GvHD and relapse) at 12 months was 75%
- Non-relapse mortality (NRM) and overall survival (OS) were 0% and 94%, respectively, at 12 months
- One MDS patient with very poor prognosis, characterized by mutated TP53 and complex karyotype, remained in CR without active signs of acute or chronic GvHD at 500 days post-alloHCT.

Outcomes, 12 months from transplant, % [95% CI]	
Disease-free survival (RFS)	94 [63,99]
Non-relapse mortality	0 [0,0]
Overall survival	94 [63,99]
Modified GRFS	75 [50,96]

Abbreviations: 95% CI, 95% confidence interval; GRFS, GvHD- and relapse-free survival; RFS, relapse-free survival

Figure. Disease-free survival at 12 months



CONCLUSIONS

Orca-T demonstrated promising results in this HR-MDS patient population, including high RFS, low incidence of GvHD, and very high OS at 1 year.

A randomized controlled phase 3 multi-center trial comparing Orca-T to SOC inpatients with MDS, AML, and ALL is currently enrolling across the US (NCT05316701).

REFERENCES

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- A Multicenter Phase Ib Trial of Patients With Advanced Hematologic Malignancies Undergoing Allogeneic Hematopoietic Cell Transplantation With Orca-T (Formerly TregGraft), a T-cell-Depleted Graft With Additional Infusion of Conventional T Cells and Regulatory T Cells. <https://clinicaltrials.gov/study/NCT04013685>.

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