TSC-101 Eliminates Recipient Hematopoietic Cells and Demonstrates Potential for Improved Relapse-Free Survival in Patients with AML, ALL, or MDS Undergoing Allogeneic HCT with Reduced Intensity Conditioning: Updated Results from the Phase 1 (ALLOHA) Trial

Abstract #28015

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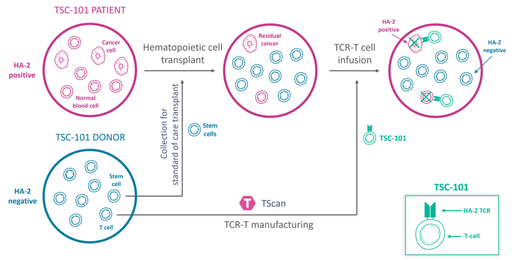
RELAPSE AFTER HCT REMAINS AN UNMET NEED

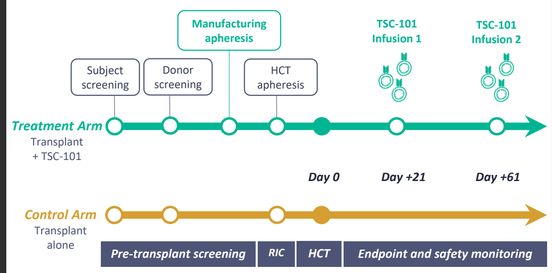
- Allogeneic hematopoietic cell transplantation (HCT) is currently the only curative option for patients with AML, ALL, or MDS
- Advances in reduced intensity conditioning (RIC) HCT regimens as well as GvHD prophylaxis with post-transplant cyclophosphamide (PTCy) have expanded patient access to HCT by markedly improving treatment-related morbidity and mortality
- However, a significant unmet medical need remains as **~ 40% of patients will relapse and subsequently die from their disease**
- TSC-101 is a donor-derived, engineered TCR-T cell product designed to treat residual disease by targeting the HA-2 antigen presented by HLA-A*02:01 and selectively eliminating patient-derived hematopoietic cells following HCT
- The ALLOHA Study (TSCAN-001, NCT05473910) is a Phase 1, multi-center, open-label, biologically controlled study evaluating TSC-101 in HA-2-positive patients with AML, ALL, or MDS undergoing RIC-HCT

TSC-101 TCR-T CELLS ARE DESIGNED TO TREAT RESIDUAL DISEASE & PREVENT RELAPSE FOLLOWING HCT



- TSC-101 is engineered to recognize HA-2 in an HLA-A*02:01-restricted manner
- This design allows TSC-101 to selectively target residual patient hematopoietic cells (malignant and non-malignant), prevent relapse, and maximize the chance of cure following allogeneic HCT

PHASE 1 TRIAL: TSC-101 IN SUBJECTS WITH AML, ALL, & MDS



Key eligibility criteria

- Age ≥18 years
- Undergoing first allo-HCT for ALL, AML, MDS
- Subject positive for HA-2 with a haploidentical HA-2 negative donor
- Eligible for RIC-HCT followed by PTCy for GvHD prophylaxis

Key endpoints

- Safety: Dose limiting toxicities, adverse events
- Efficacy
- Exploratory endpoints: Donor chimerism, minimal residual disease

MAJORITY OF SUBJECTS IN THE TREATMENT AND CONTROL ARMS ARE AT HIGH RISK FOR RELAPSE

		TSC-101	Control
Enrolled Subjects		23	19
Evaluable Subjects*		19 (100%)	18 (100%)
Median Time from HCT, months		13.4 (4-33)	16.1 (1-36)
Age, Median (Range)		65 (52-74)	66 (23-77)
Sex, Male %)		13 (68%)	9 (50%)
Underlying Disease	ALL	2 (11%)	1 (6%)
	AML	13 (68%)	11 (61%)
	MDS	4 (21%)	6 (33%)
Genetics/ cytogenetics	**TP53 mutated**	**6 (32%)**	**2 (11%)**
	Adverse Risk**	13 (68%)	11 (61%)
Pre-HCT MRD Positive		13 (68%)	8 (44%)
MRD positive or adverse risk genetics		**15 (79%)**	**13 (72%)**
Clinical Status at time of HCT			
CR1		9 (47%)	12 (67%)
CR2		2 (11%)	1 (6%)
MLFS		5 (27%)	0 (0%)
Hematologic improvement		1 (5%)	0 (0%)
PR		1 (5%)	1 (6%)
Untreated		1 (5%)	1 (6%)
Other status		0 (0%)	3 (17%)

September 19, 2025 data cut
All HCT donors were haploidentical
*Subjects on the treatment arm who received ≥1 infusion of TSC-101 and on the control arm who reached Day 21 were considered evaluable for safety and efficacy
**Adverse risk is defined as having either an IPSS-M mutation if the subject has MDS or European Leukemia Network (ELN) high risk genetics or cytogenetics for AML

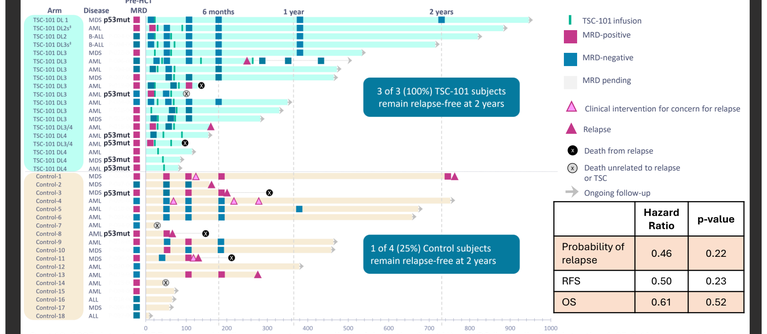
ADVERSE EVENTS OF SPECIAL INTEREST WERE LOW GRADE AND MANAGEABLE

- No DLTs reported
- Low rates of Grade III – IV acute GvHD (aGVHD) across both arms
- No moderate or severe chronic GvHD (cGVHD) with TSC-101
- Three cases of CRS reported after TSC-101 infusions
  - Two Grade 1 events and one Grade 2 event; all resolved
- One case of ICANS reported after a TSC-101 infusion
  - Depressed consciousness (Grade 2) reported following infusion #2 in a patient with relapsing disease. Treated with tocilizumab and steroids; resolved within 24 hours

	TSC-101 (n=19)	Control (n=18)
Treatment- emergent aGvHD (MAGIC)	12 (63%)	10 (56%)
Grade I	8 (42%)	5 (28%)
Grade II	3 (16%)	4 (22%)
Grade III	1 (5%)	1 (6%)
Grade IV	0 (0%)	0 (0%)
Any Treatment-emergent cGvHD (NIH)	1 (5%)	2 (11%)
Mild	1 (5%)	1 (6%)
Moderate	0 (0%)	1 (6%)
Severe	0 (0%)	0 (0%)
Any CRS	14 (74%)	7 (39%)
Grade 1 - 2	14 (74%)	6 (33%)
Grade 3 - 4	0 (0%)	1 (6%)
Treatment-emergent CRS	3 (16%)	0 (0%)
Grade 1 - 2	3 (16%)	0 (0%)
Grade 3 - 4	0 (0%)	0 (0%)
Any ICANS	1 (5%)	0 (0%)

TSC-101 IS ASSOCIATED WITH FEWER RELAPSES, MORE DURABLE REMISSIONS, AND LONGER SURVIVAL

- All subjects who were MRD-positive post-HCT became MRD-negative following their first infusion of TSC-101
- Subjects treated with TSC-101 demonstrated a longer duration of response vs. control
- Preliminary efficacy data trends support a reduced risk of relapse and increased survival (RFS & OS) with TSC-101 relative to subjects that did not receive TSC-101 TCR-T cell therapy



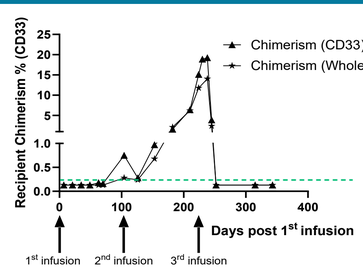
	Hazard Ratio	p-value
Probability of relapse	0.46	0.22
RFS	0.50	0.23
OS	0.61	0.52

Sept 19, 2025 data cut; MRD measured by flow cytometry (lower limit of detection 0.1-1%) or NGS (lower limit of detection 0.05-0.1% in myeloid and 0.001-0.01% in lymphoid malignancies). ‡Dose did not meet target dose criteria in supplemental cohorts

MORE SUBJECTS IN COMPLETE DONOR CHIMERISM AT ALL TIMEPOINTS POST TSC-101 INFUSION COMPARED TO CONTROL

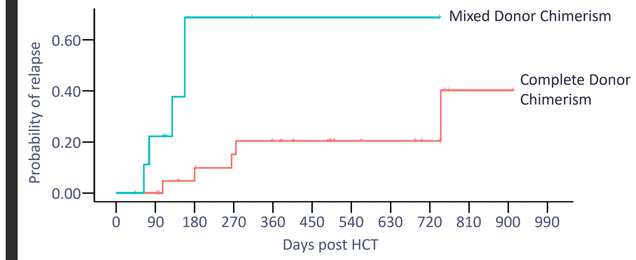
#Donor chimerism results using investigational NGS assay (Alloheme) with LOD of 0.2% or the short tandem repeat (STR) with LOD of 1-2% at indicated days post-HCT (± 3 days, y-axis) in patients at least 60 days post-HCT as of 19 Sept 2025 data cut; ‡Dose did not meet target dose criteria in supplemental cohorts

CASE STUDY: TSC-101 INFUSION POST-RELAPSE CONVERTED SUBJECT TO FULL DONOR CHIMERISM AND COMPLETE REMISSION



- 74 yo male with AML in CR1 received 2 infusions of TSC-101 per DL3 (see red box above)
- 2nd infusion was delayed by 36 days due to treatment of aGvHD
- Received 370M cells at relapse without lymphodepletion or additional chemotherapy
- Rapid conversion to full donor chimerism. No evidence of disease at next evaluation and remained in CR for 5 months

EARLY CHIMERISM RESULTS ARE PREDICTIVE OF RELAPSE



Relapse probability by chimerism status at 2 months post-HCT (HR 6.1, p= 0.009)
Donor chimerism results using investigational NGS assay (Alloheme) with LOD of 0.2% in study patients approximately 60 days post-HCT as of Sept 19, 2025 data cut; Full Donor Chimerism required in both CD33+ and whole blood subsets, Mixed Chimerism comprises mixed chimerism in either subset

- Chimerism status at 2 m post-HCT is predictive of relapse-free survival (HR 4.6, p=0.02)
- Chimerism status at 4 m post-HCT is predictive of probability of relapse (HR 5.3, p=0.04)
- Chimerism status at 4 m post-HCT is predictive of relapse-free survival (HR 5.3, p=0.04)

CONCLUSIONS

- TSC-101 is well-tolerated with no DLTs
- Longer-term follow-up demonstrates TSC-101-treated subjects remain in durable remission post infusion (3 subjects > 2 years; 7 subjects > 1 year)
- Direct evidence of anti-tumor activity in subject treated with TSC-101 post-relapse converting to complete remission with no other anti-cancer therapy
- Mixed chimerism and relapse in the TSC-101 arm appear associated with high *ex-vivo* expansion of TCR-T cells (presented at ASH 2025[8])
- *Ex-vivo* expansion is reduced with commercial-ready process (presented at ASH 2025[8])
- Ongoing trend toward improved relapse-free survival in TSC-101-treated subjects relative to control subjects
- These data support the continued evaluation of TSC-101 to eliminate residual disease and prevent relapse in subjects with hematological malignancies post allogeneic HCT
- Pivotal trial to commence in Q2 2026

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ABBREVIATIONS

ALL, Acute Lymphoblastic Leukemia; AML, Acute Myeloid Leukemia; CR, complete remission; CRS, Cytokine Release Syndrome; DL, Dose level; DLT, Dose Limiting Toxicity; GvHD, Graft vs. Host Disease; HCT, Hematopoietic Cell Transplantation; HLA, Human Leukocyte Antigen; HR, Hazard Ratio; ICANS, Immune Effector Cell Associated Neurotoxicity Syndrome; m, months; M, million; MDS, Myelodysplastic Syndrome; MLFS, morphologic leukemia-free state; MRD, minimal residual disease; OS, Overall Survival; PR, partial remission; PTCy, Post-Transplant Cyclophosphamide; RIC, Reduced Intensity Conditioning; RFS, Relapse Free Survival; TCR, T-cell Receptor

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