



UNIVERSAL Updated Phase 1 Data Highlight Role of Allogeneic Anti-BCMA ALLO-715 Therapy for Relapsed/Refractory Multiple Myeloma (UNIVERSAL Study)

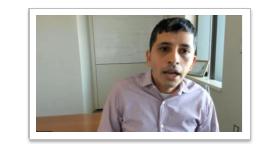
S. Mailankody¹, J.V. Matous², M. Liedtke³, S. Sidana⁴, O.O. Oluwole⁵, M. Meera⁶, J.C. Cruz⁷, R. Nath⁸, F. Anwer⁹, A. Rossi¹⁰, M. Htut¹¹, S.A. Malik¹², S. Ghatta¹³, M. Dillon¹³, W. Ying¹³, L. Navale¹³, E.E. Karski¹³, A. Balakumaran¹³ and S.K. Kumar¹⁴

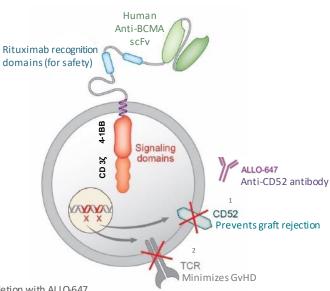
1. Cellular Therapeutics Center, Memorial Sloan Kettering Cancer Center, New York, NY; 2. Colorado Blood Cancer Institute, Denver, CO; 3. Department of Medicine, Stanford University, Stanford, CA; 4. Division of Blood and Marrow Transplantation & Cellular Therapy, Stanford University, Stanford, CA; 5. Vanderbilt University Medical Center, Nashville, TN; 6. Division of Hematology and Oncology, Medical College of Wisconsin, Milwaukee, WI; 7. Texas Transplant Institute, San Antonio, TX; 8. Banner Health Center, Gilbert, AZ; 9. Taussig Cancer Institute, Department of Hematology and Medical Oncology, Cleveland Clinic, Cleveland, OH; 10. Icahn School of Medicine, Mount Sinai Hospital, New York, NY; 11. Department of Hematology/HCT, City of Hope National Medical Center, Duarte, CA; 12. Sarah Cannon Transplant & Cellular Therapy Program at St. David's South Austin Medical Center, Austin, TX; 13. Allogene Therapeutics, South San Francisco, CA; 14. Mayo Clinic, Rochester, MN

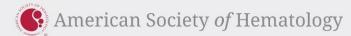
The First Allogeneic anti-BCMA CAR T Study for R/R Multiple Myeloma

- BCMA autologous chimeric antigen receptor (CAR) T cell therapy has demonstrated unprecedented efficacy, but is not readily available to all patients
- Allogeneic CAR T cell therapy has the potential for all eligible patients to receive therapy on demand
- ALLO-715 (anti-BCMA) is an allogeneic CAR T cell product utilizing TALEN®* gene editing specifically designed to:
 - Disrupt TCRα constant gene to reduce the risk graft-versus-host disease (GvHD)
 - Knock-out CD52 gene permits use of ALLO-647 (a humanized anti-CD52 mAb) to selectively deplete host T cells while protecting donor cells
 - 1. TALEN-mediated CD52 KO allows selective lymphodepletion with ALLO-647









UNIVERSAL: First Allogeneic BCMA CAR T in Multiple Myeloma

Phase 1, Open-label, Multicenter Dose Escalation Study Enrolling in Thirteen US Centers



Doses

30 mg/m²/day x 3 days

300 mg/m²/day x 3 days

13 to 30 mg/day x 3 days

Key Eligibility Criteria

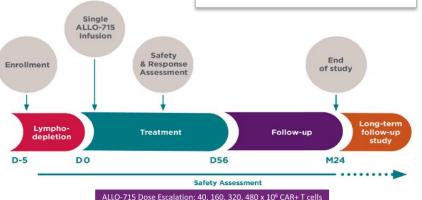
- Relapsed/Refractory Multiple Myeloma
- ≥ 3 prior therapies including IMiD, proteasome inhibitor & anti-CD38
- Refractory to last prior therapy
- ECOG 0 or 1
- No donor-specific antibodies
- No bridging therapy allowed

Primary Endpoints

Safety and tolerability

Secondary Endpoints

- Recommended ALLO-715 Phase 2 dose and lymphodepletion regimen
- Anti-tumor activity (ORR, duration of response, PFS, and MRD)
- ALLO-715 cellular kinetics (blood levels of anti-BCMA CART cells)
- ALLO-647 pharmacokinetics (serum ALLO-647 concentrations)



ALLO-715 dose expansion was at 320M CAR+ (DL3) using FCA39 and FCA60 Lymphodepletion regimens and is reported here

Lymphodepletion Regimens

(FCA*, CA†)

Fludarabine

Cyclophosphamide

ALLO-647



^{*} FCA conditioning with fludarabine, cyclophosphamide and ALLO-647

[†] CA conditioning with cyclophosphamide and ALLO-647

Patient Demographics of DL3 Expansion

Table 1. Patient Demographics, Disease Status, and Prior Therapies in DL3 Expansion

	DL3 (320 x 10 ⁶ CAR+ T Cells)				
	N=28	FCA39 (n=11)	FCA60 (n=17)		
Age, median (range), yrs	65 (49, 78)	66 (57, 77)	65 (49, 78)		
Gender: Male / Female, %	64 / 36	64 / 36	65 / 35		
ECOG PS: 0 / 1, %	50 / 50	55 / 46	47 / 53		
ISS Stage III, %	25	0	41		
High-Risk Cytogenetics*, %	25	27	29		
Extramedullary Disease, %	29	36	24		
High Tumor Burden at Screening⁺, %	25	36	18		
Time Since Initial Diagnosis, median (range), yrs	7.2 (1.9, 26.4)	6.4 (2.5, 20.5)	8.1 (1.9, 26.4)		
Prior Anti-Myeloma Regimens, median (range)	6 (3, 9)	8 (3, 9)	6 (3, 9)		
Prior Autologous SCT, %	89	91	88		
Penta-refractory, n (%)	25	36	24		



- Median time from enrollment to LD was 5 days
- No patients required bridging therapy
- 92% of enrolled patients received ALLO-715 with 100% manufactured and released as per product specifications
- In the DL3 expansion cohorts, 24 (86%) were penta exposed

 $^{^{\}dagger}\,\text{High tumor}$ burden consider when $\,$ more than 50% plasma cells in bone marrow



^{*} High risk cytogenetics is defined as del 17p, t(4;14), and t(14;16)

ALLO-715 and ALLO-647 Demonstrated Manageable Safety Profile

Table 2. Adverse Events of Special Interest (Safety Analysis Set)

TEAE of Interest* (N=54)	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All Grades
	n (%)					
Cytokine Release Syndrome	16 (30)	11 (20)	1 (2)	0 (0)	0 (0)	28 (52)
Neurotoxicity [†]	25 (46)	10 (19)	1 (2)	0 (0)	0 (0)	36 (67)
Graft-versus-Host Disease	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Infection [‡]	7 (13)	9 (17)	13 (24)	0 (0)	3 (6)	32 (59)
Infusion Reaction to ALLO-647	8 (15)	8 (15)	1 (2)	0 (0)	0 (0)	17 (31)

- Manageable safety profile with low-grade and reversible neurotoxicity and no GvHD
 - CRS was low grade except 1 Gr 3
 - Low use of tocilizumab 24% and steroids 17%

- 28 (52%) of patients experienced an SAE
- Gr 3+ adverse events (AEs) occurred in 47 (87%) of patients which included neutropenia
- 3 Gr 5 infections were previously reported; no new Gr 5 events occurred since last report

^{*} Number of patients with AE occurring from the start of study drug up to subsequent anti-cancer therapy. For patients reporting more than one AE within a preferred term, only one AE with the maximum grade is reported

[†] Events of NT identified using Allogene MedDRA query, over 200 preferred terms (PT) selected to identify the medical concept of Neurologic toxicities including ICANs

[‡] All infections (bacterial, fungal, and viral) included

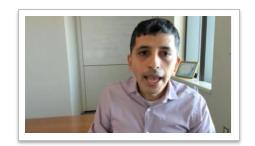
Efficacy of ALLO-715 and ALLO-647*

Response Rates in Expansion Cohorts

Table 3. Responses in Efficacy Evaluable Patients Followed ≥3 Months

Cell Dose	DL3 (320M CAR+ T Cells)				
LD Regimen	FCA39 (n=11)	FCA60 (n=12)	Total (n=23)		
ORR,* n (%)	7 (64)	8 (67)	15 (65)		
95% CI	31, 89	35, 90	43, 84		
VGPR+† rate, n (%)	6 (54)	5 (42)	11(48)		
95% CI	23, 83	15, 72	27, 69		
CR/sCR [‡] rate, n (%)	3 (27)	2 (17)	5 (22)		
95% CI (%)	6, 61	2, 48	8, 44		
Median DOR	8.3	9.2	8.3		

VGPR+ = sCR, CR, or VGPR



- Median follow-up for efficacy evaluable set[§] is 14.8 months and 19.8 months in the FCA60 cohort
- Five patients followed for less than 3 months are not included due to limited follow-up, with best responses ranging from SD to PR

^{*}Overall response rate, confirmed; clinical response evaluation was based on International Myeloma Working Group (IMWG) response criteria. An objective response is defined as a partial response or better.

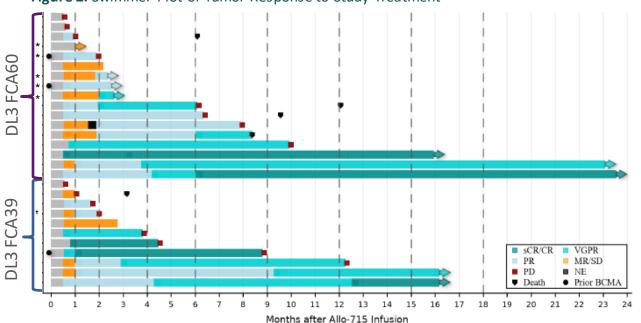
[†]VGPR+ is very good partial response, complete response or stringent complete response, confirmed.

[‡]Complete response/stringent complete response.

[§]Patients with minimum follow up of 3 months only.

Tumor Response to Study Treatment for DL3 Expansion Cohorts

Figure 2. Swimmer Plot of Tumor Response to Study Treatment





Dose level 3 CAR+ T cell dose achieved durable responses in patients with R/R MM:

- In the DL3 FCA60 efficacy evaluable set, the median DOR was 9.2 months with the longest ongoing response at 24 months
- All patients who achieved a VGPR+ were MRD negative
- Responses were seen across all subgroups including patients with high-risk cytogenetics and extra medullary disease

[†] Unconfirmed response of Partial Response; Best Overall Response was stable disease



^{*} Followed for <3 months and not included on response analysis

Summary

These results demonstrate feasibility of "off the shelf" CAR T in Multiple Myeloma



- 92% of enrolled patients received product with 100% of infused product manufactured and released as per product specifications
- Median time from enrollment to LD was 5 days; no patients required bridging therapy
- ALLO-715 and ALLO-647 demonstrated manageable safety profile on par with autologous CAR T therapies¹
- UNIVERSAL demonstrates significant and durable responses from allogeneic CAR T therapy with ongoing responses up to 24 months
- A dose of 320 million cells with FCA conditioning appears promising; 100% of VGPR+ patients achieved MRD negative status and this dose deserves further exploration

1. Based on Abecma and Carvykti USPI



THANK YOU

To Patients, their families and caregivers, Clinical Trial Investigators and Sites

ALLO-715 (BCMA) utilizes TALEN® gene-editing technology pioneered and owned by Cellectis. Allogene has an exclusive license to the Cellectis technology for allogeneic products directed at this target and holds all global development and commercial rights for this investigational candidate.