

The Next Revolution in Cell Therapy

Leading Today, Creating Tomorrow

September 2023



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Allogene: On a Mission for Patients

6 Foundational platform technologies



- AlloCAR T™
- TurboCAR™
- Cloak™ & Dagger™
- Alloy™ manufacturing
- iPSC

>175 Patients treated*



Data from nearly as many patients with AlloCAR T as from key competitors combined

*Phase 1 trials

\$545 million

in cash, cash equivalents and investments as of June 30, 2023



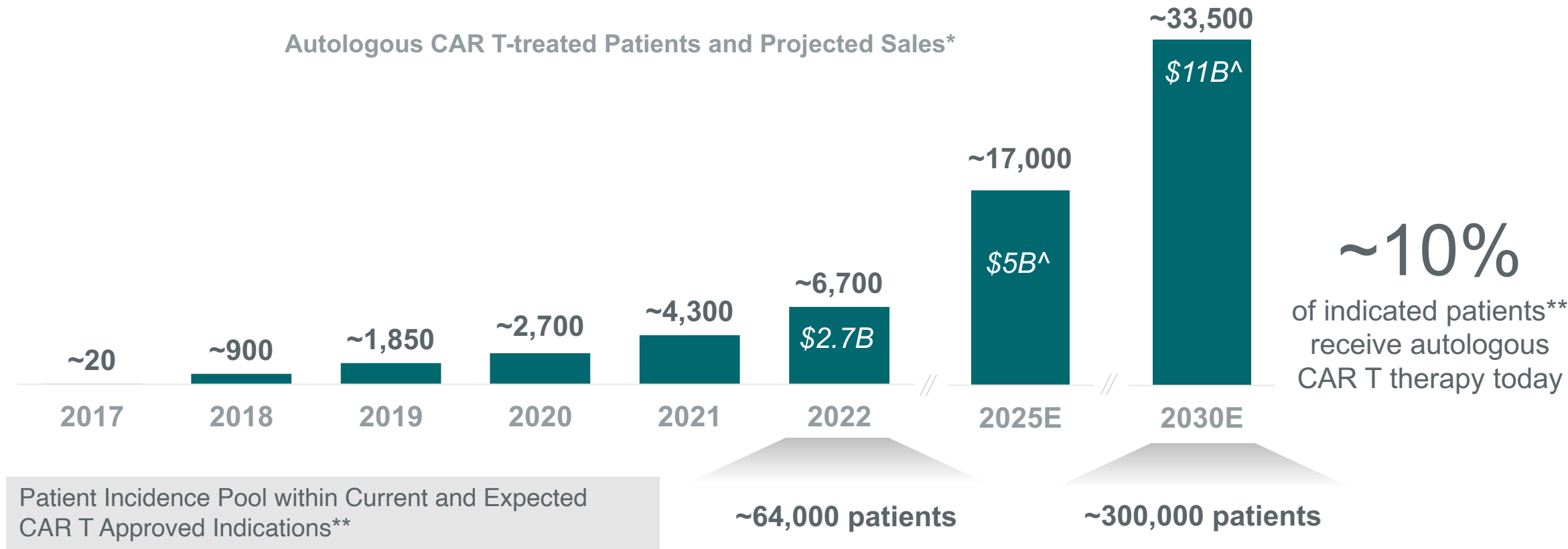
Resources focused on defining the field and writing the allogeneic CAR T playbook



singular focus on allogeneic cell therapy

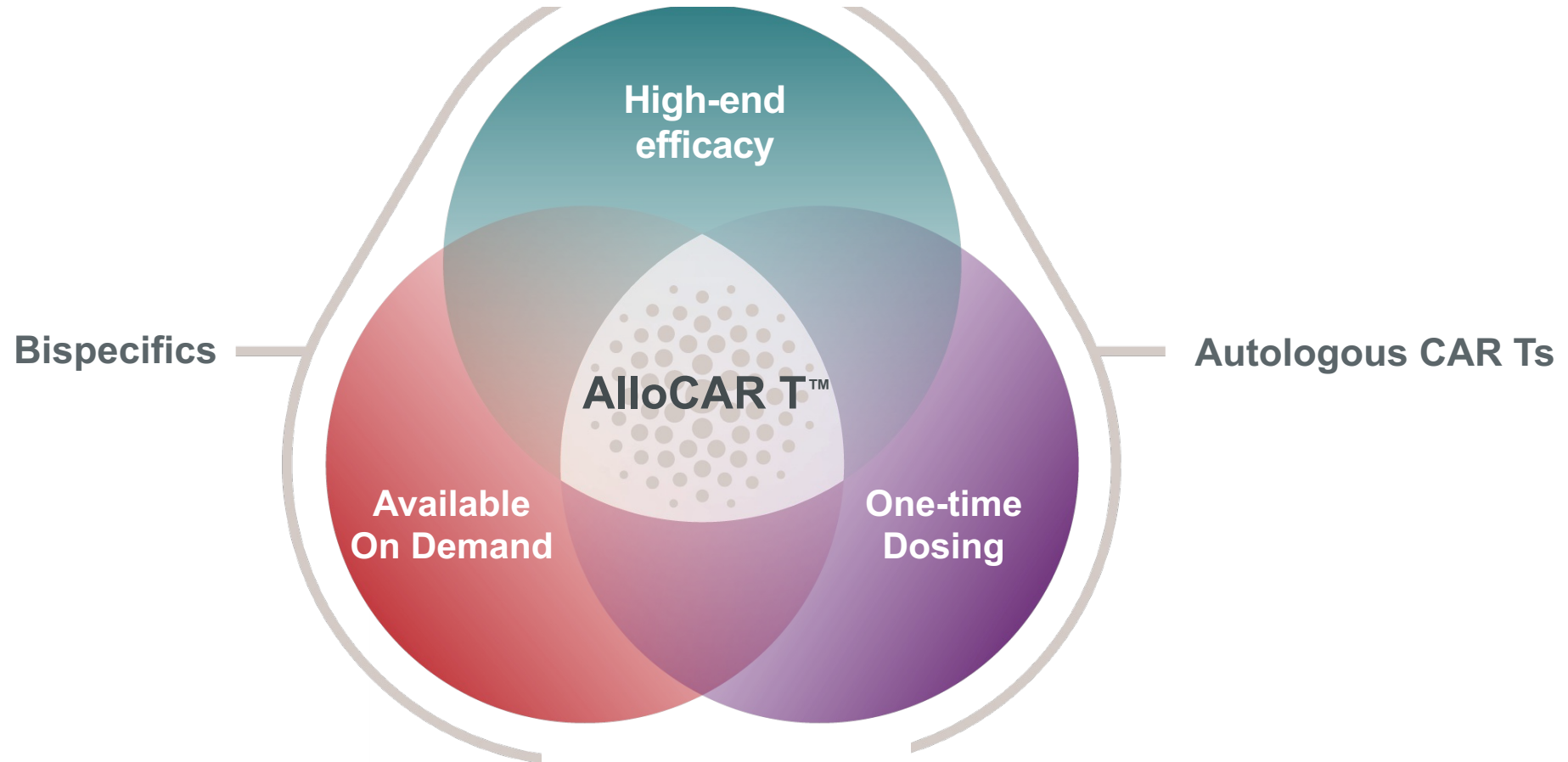
The industry's **first** Potentially Pivotal Phase 2 allogeneic CAR T trial

CAR T Sales Projected to Grow into an Expanding Market



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*2017-2022 estimated and rounded based on manufacturer-reported sales and average \$400K/patient assumption; 2025-2030 estimated and rounded based on Decision Resources Group sales and market share projections
**Decision Resources Group epidemiology for drug-treated incidence G7 markets, rounded and not necessarily reflecting specific medical eligibility criteria for autologous CAR T therapies; current indications defined as 2L/3L+ LBCL, 3L+ FL, r/r MCL, r/r Adult ALL, r/r Pediatric/Young Adult ALL, 5L+ MM; expected future indications represent Allogene assumptions on CAR T indications in 2030 and include 1L+ LBCL, 2L+ FL, r/r MCL, 1L+ MM
^ Decision Resources Group estimated autologous CAR T sales for 2L+ LBCL, 2L+ FL, 3L+ MCL and 3L+ MM in 2025 and 2L+ LBCL, 2L+ FL, 3L+ MCL, and 1L+ MM in 2030

AlloCAR T Uniquely Positioned to Deliver Value to Patients



Deep AlloCAR T Pipeline Opportunity

	Target	Program	Trial name	Study population	Discovery	IND-enabling	Phase 1	Phase 2 ¹	Approved	Designation	Next milestone
Hematologic Malignancies	CD19	ALLO-501A	ALPHA2	3+ Line LBCL						FTD RMAT	Target enrollment completion 1H 2024
	CD19	ALLO-501A + ALLO-647 ²	EXPAND	3+ Line LBCL							Initiated
	CD19	ALLO-501A	ALPHA3	Earlier Line LBCL							Ph3 readiness in 2023
	CD19	CD19 - Next Generation									
	BCMA	ALLO-715	UNIVERSAL	5+ Line MM						RMAT ODD	Reviewing Process Improvements
	BCMA	ALLO-605 ³	IGNITE	5+ Line MM						FTD ODD	Reviewing Process Improvements
	CD70	ALLO-316		Heme Malignancies							
	FLT3	ALLO-819		AML							
Solid Tumors	CD70	ALLO-316	TRAVERSE	ccRCC						FTD	Cohort expansion 2023
	CD70	ALLO-316		Basket Study							Determine histologies for inclusion
	DLL3	ALLO-213		SCLC							
	Claudin 18.2	ALLO-182		Gastric & Pancreatic Cancer							
		7 undisclosed targets									

¹Phase 3 may not be required if Phase 2 is registrational; ²ALLO-647 (anti-CD52 mAb) is intended to enable expansion and persistence of allogeneic CAR T product candidates; ³TurboCAR™



CD19 Program

ALLO-501A: 1st Allogeneic CAR T to Enter Phase 2 Pivotal Study

Program Optimization



Dosing

- Lymphodepletion: Established ALLO-647 dose response relationship
- Cell Dosing: single 120M cell infusion



Manufacturing

- Alloy™ material demonstrates robust performance



Next Steps

- Complete Phase 2 trial enrollment in r/r LBCL (1H 2024)
- Earlier line Phase 3 readiness expected in 2023; initiation in 1H 2024

ALPHA & ALPHA2 Trials

Efficacy: Appears Comparable to Approved CD19 Autologous CAR Ts

- 67% ORR and 58% CR in r/r LBCL among the 12 patients treated with the Single Dose FCA90 regimen using Alloy™ process material
- Robust durability with 6- and 12-month CR rates of 50%

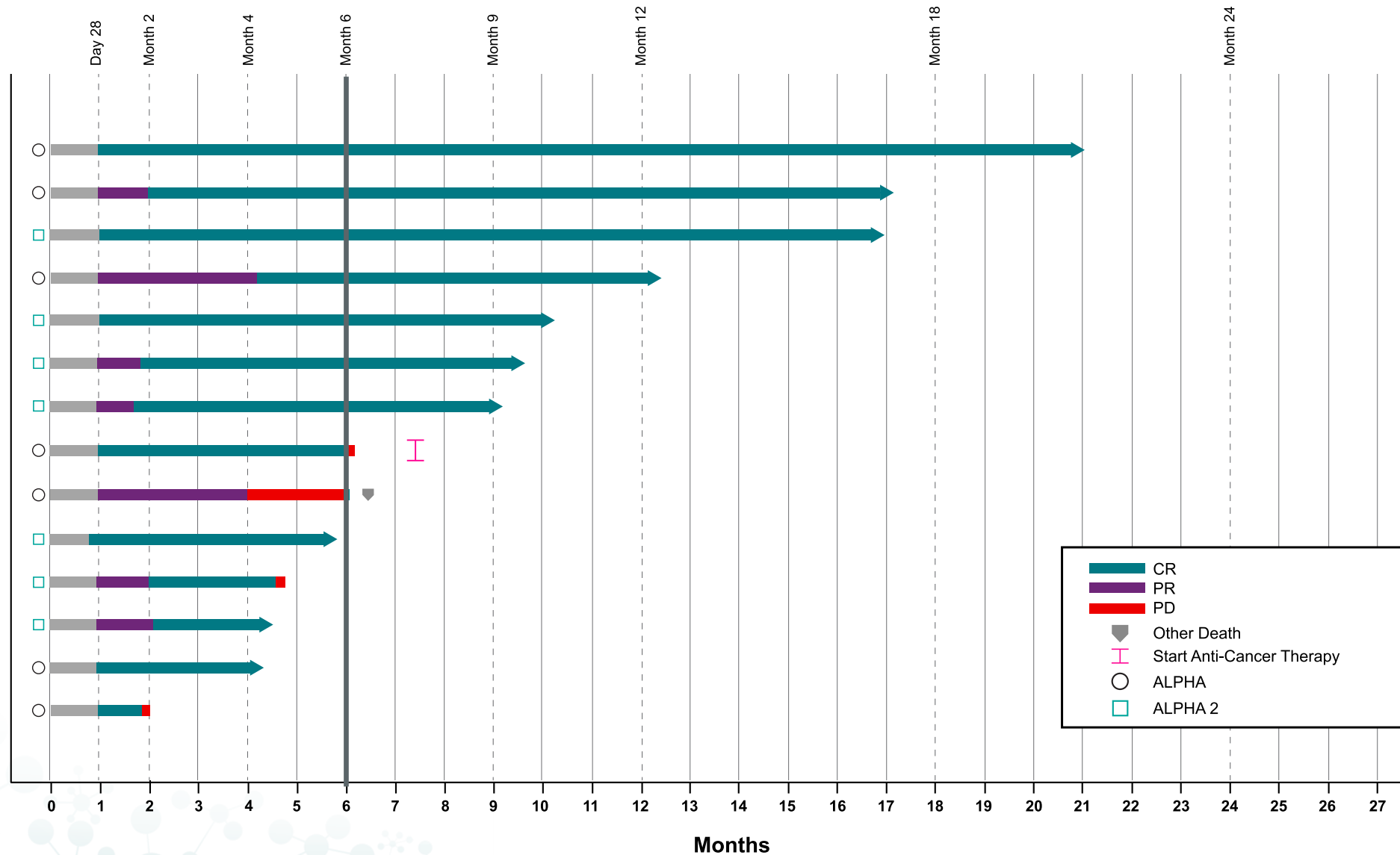
Safety: Appears Similar or Slightly Better than Autologous CAR Ts

- No DLTs, GvHD or severe ICANS
- Low grade CRS
- 17% prolonged Gr3+ cytopenia
- Grade 3+ infection rates similar to autologous CAR T trials

Delivery: Ability to Meet Current Demand & Grow Market

- Scalable, optimized Alloy™ manufacturing process
- 100% of product in spec
- Treatment within 2-5 days of enrollment

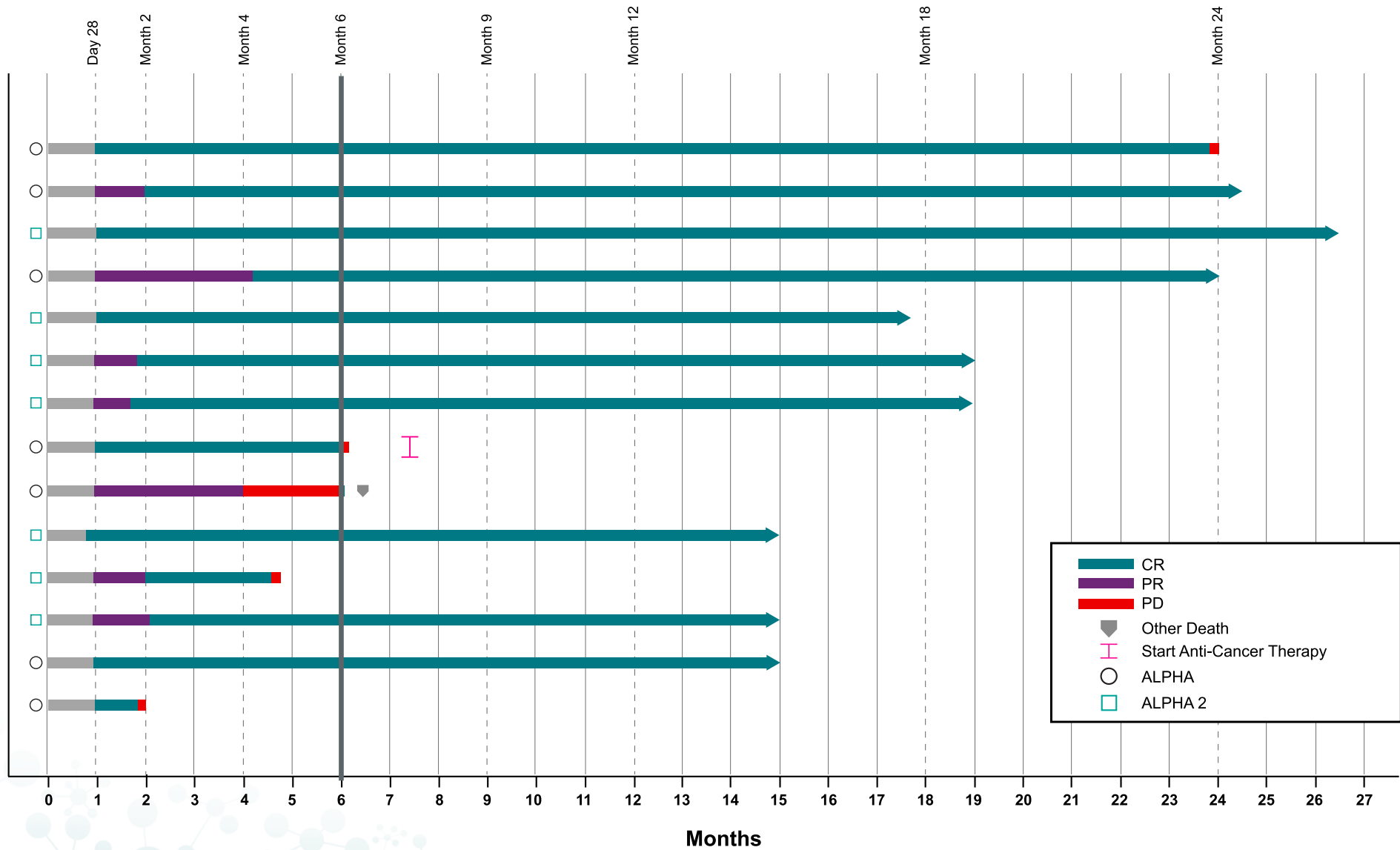
ASH 2021: Status of LBCL Patients Who Achieved a Complete Response



10 of 14
patients were
in ongoing CR

Oct 2022 Update: Responses Remain Durable in LBCL with Additional Follow-Up

9 of 14
patients in
ongoing CR

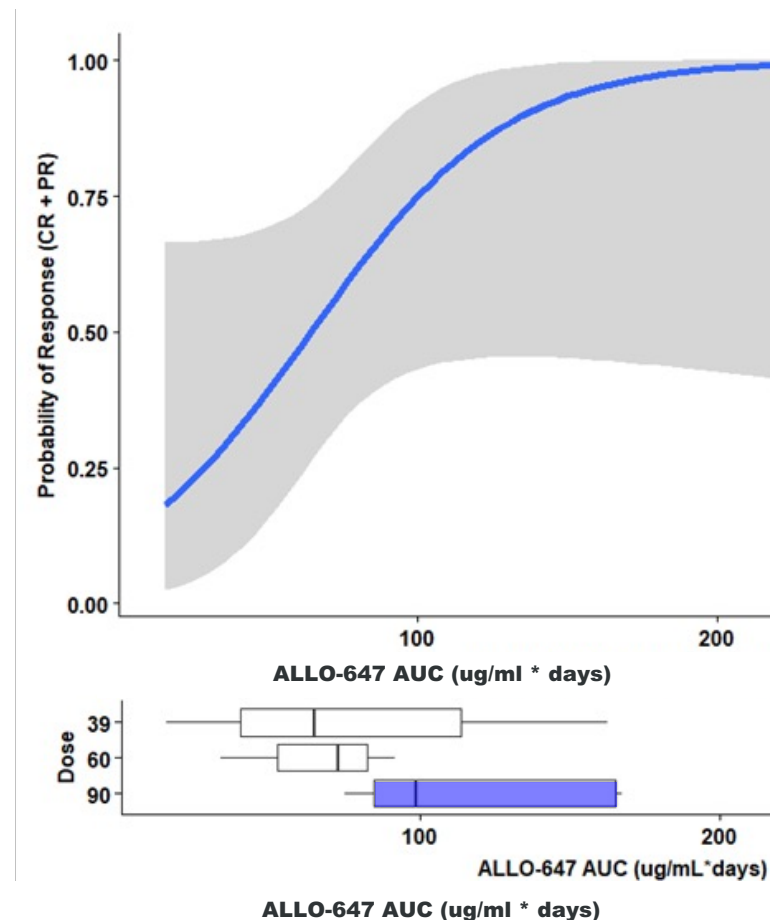


Data Cutoff Date: October 25, 2022

ALLO-647 Improves the Likelihood of Response

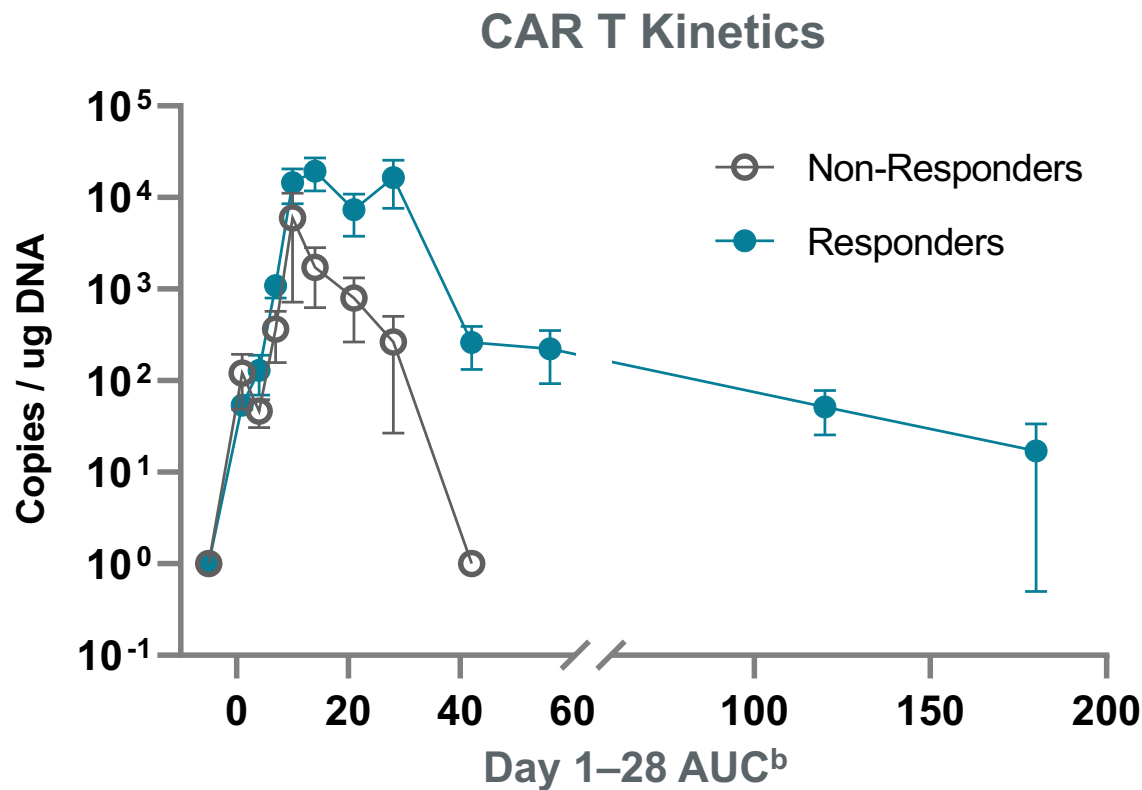
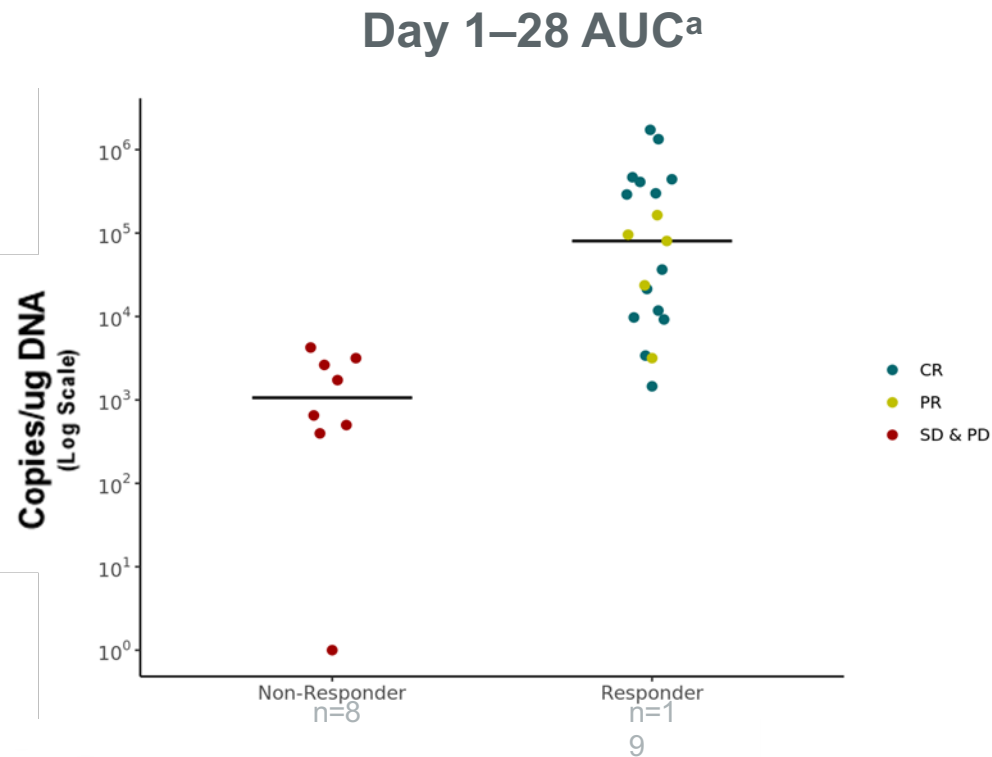
ALLO-647 (anti-CD52 mAb) Prevents Premature Rejection of Allogeneic CAR T Cells

- AlloCAR T dosed with standard FC lymphodepletion results in limited response rate and durability
- ALLO-647 + FC (FCA) compared to FC alone* leads to significant CAR T cell expansion
- Data demonstrate dose response relationship between ALLO-647 exposure and likelihood of response and cell expansion



*ASH 2018 Benjamin, R Abstract # 612

CAR T Cell Expansion Is Associated With Response



AUC = area under the curve; $p = 0.0000554$ by unpaired t-test.

^a6 subjects excluded from AUC for having missing data.

^bData shown for visits before, or without, consolidation or re-treatment.

Data cutoff: April 20, 2023.

CD19 AlloCAR T: Safety and Efficacy Highly Competitive with Auto CAR T

	All Alloy (n=33)	FCA90 Alloy (n=12)	KYMRIA ^{®1} Phase 2 Pivotal	YESCARTA ^{®2} Phase 2 Pivotal	BREYANZI ^{®3} Phase 2 Pivotal
ORR	58%	67%	50% (label)	72% (label)	73% (label)
CR in LBCL (mITT)	42%	58%	32% (label)	51% (label)	54% (label)
CR at 6 months in LBCL (mITT)	31%	50%	29%	36%	~ 40%
CRS (Gr 3+)	0%	0%	22%	13%	4%
Neuro Events (Gr3+)	6%	0%	12%	31%	12%
Infection (Gr3+)	15%	8%	20%	23%	19%
n enrolled who did not receive intended cell product	n=3	n=1 ^{***}	33% ^{**}	9% ^{**}	36% [^]

¹ KYMRIA[®] USPI and Schuster S et al NEJM 2019. Patient population in the label includes: 78% - primary DLBCL not otherwise specified (NOS); 22% DLBCL following transformation from Follicular Lymphoma

² YESCARTA[®] USPI and Neelapu, NEJM 2017. Patient population in the label includes: 76% - DLBC; 16% - Transformed Follicular Lymphoma; 8% Primary Mediastinal Large B-cell Lymphoma.

³ BREYANZI[®] USPI and Abramson, Lancet, 2020. Patient population in label includes: 53% - de novo DLBCL; 25% DLBCL transformed from indolent Lymphoma; 14% high-grade B-cell Lymphoma; 7% Primary Mediastinal Large B-cell Lymphoma; 1% grade 3B Follicular Lymphoma

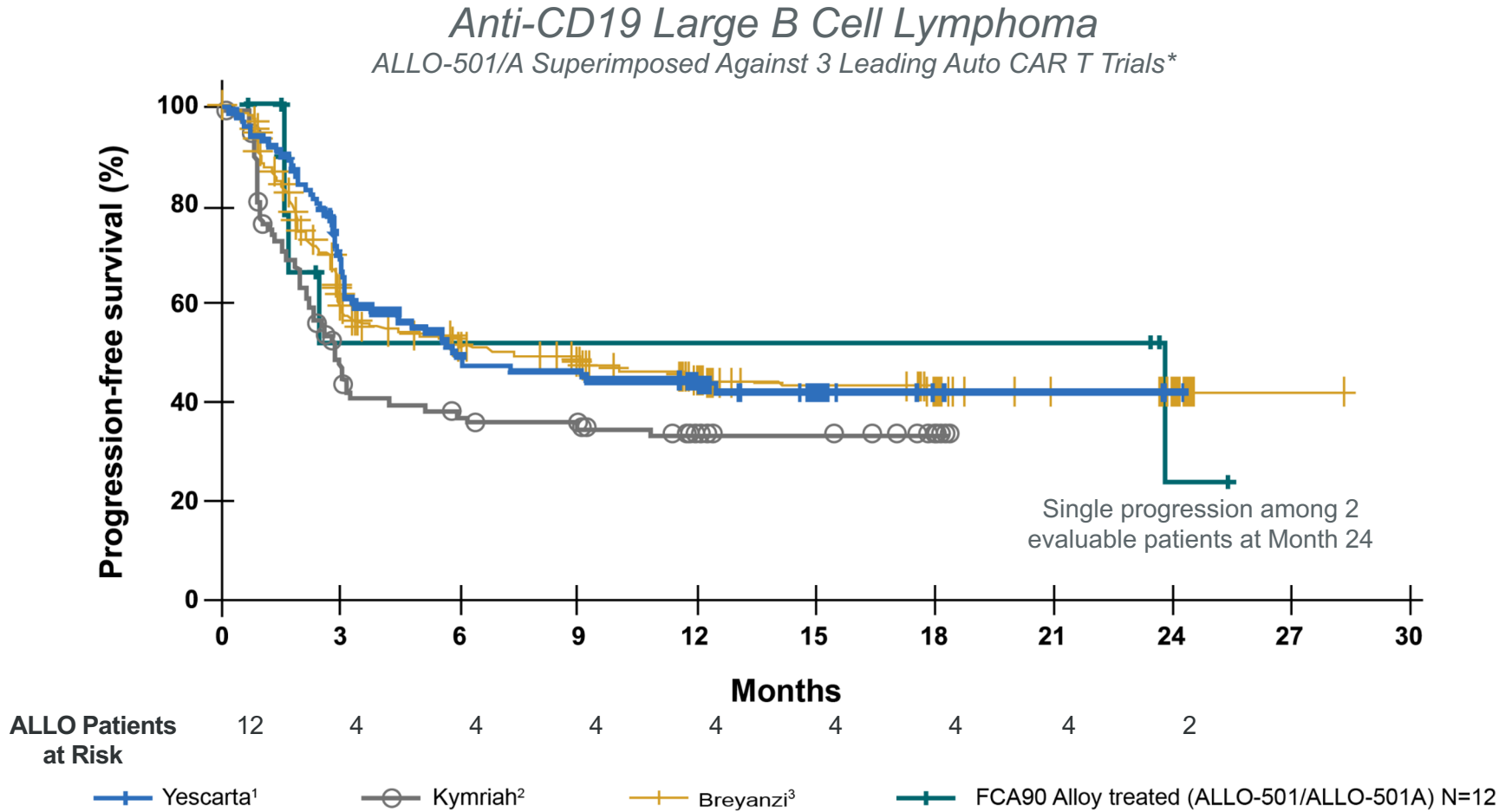
^{**}Percent of patients who enrolled and did not receive intended cell product including out of spec products

^{***}After enrollment, one subject was found to have CNS involvement and was excluded

[^]Percent who underwent lymphodepletion but did not receive intended cell product including out of spec products

FOR ILLUSTRATIVE PURPOSES ONLY: no head-to-head clinical trial has been conducted. Differences exist between trial designs and subject characteristics, and caution should be exercised when comparing data across studies.

CD19 AlloCAR T: Only Allogeneic CAR T with PFS Tracking with Autologous CAR T



* 1. Neelapu SS, et al. *N Engl J Med*. 2017;377:2531-44. 2. Schuster SJ, et al. *N Engl J Med* 2019;380:45-56. 3. Abramson JS, et al. *Lancet* 2020; 396: 839-52.

3L+ LBCL Program Intended for Approval of ALLO-501A & ALLO-647

ALPHA2 Phase 2 Study (n=100)

Screening/ Enrollment	Lymphodepletion (d -5 to -3)	Treatment (d0)	Primary EPs
	<ul style="list-style-type: none"> Flu 30 mg/m² IV x3 Cy 300 mg/m² IV x3 ALLO-647 90 mg IV 	ALLO-501A: single IV infusion of 120M CART cells on day 0	<ul style="list-style-type: none"> ORR CR

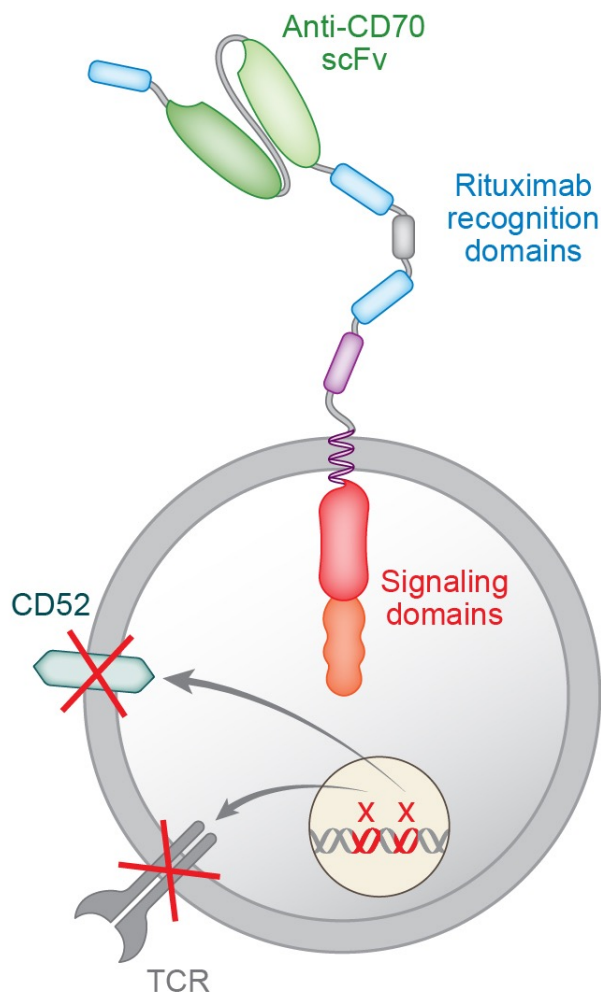
EXPAND Phase 2 Study (n=70)

Screening/Enrollment	Active Arm: Lymphodepletion (d -5 to -3)	Treatment (d0)	Primary EP • PFS
	<ul style="list-style-type: none"> Flu 30 mg/m² IV x3 Cy 300 mg/m² IV x3 ALLO-647 90 mg IV 	ALLO-501A: single IV infusion of 120M CART cells on day 0	
	Control Arm: Lymphodepletion (d -5 to -3)	Treatment (d0)	
	<ul style="list-style-type: none"> Flu 30 mg/m² IV x3 Cy 300 mg/m² IV x3 	ALLO-501A: single IV infusion of 120M CART cells on day 0	



CD70 Program

ALLO-316: A Potentially Best-In-Class Candidate for RCC



ALLO-316 Engineered for Optimal Activity

- "Masking" technology to avoid fratricide during manufacture and to eliminate need for CD70 knock out
- Dagger™ technology aimed at enhancing cell persistence and expansion
- Open field of unmet need
 - Tivozanib approved in 3L+ setting: ORR <20% and mPFS <6mo*

*Tivozanib PI

CD70 Target Selectively Expressed in RCC, Other Tumors

- Phase 1 ongoing in 3L+ RCC, a large indication with unmet need

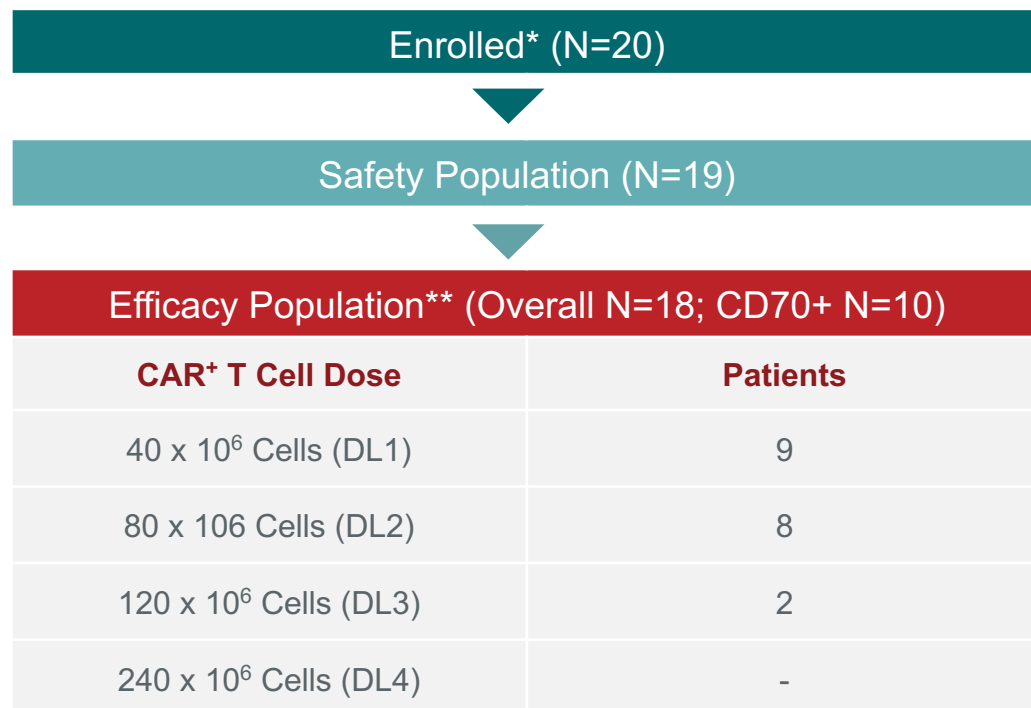
TRAVERSE Phase 1 Shows Encouraging Activity in CD70+ RCC

- 30% ORR, 100% DCR in patients with established CD70+ expression
- AE profile generally consistent with autologous CAR T therapies , no GvHD, 1 Grade 3 DLT

Next Steps

- Establish Phase 2 regimen in ongoing TRAVERSE trial
- Explore other solid tumor and hematologic indications or combination with other anticancer therapies such as immune checkpoint inhibitors

ALLO-316 TRAVERSE Phase Trial: Patient Flow



- Study enrolled patients with clear cell RCC
 - Patients must have received a checkpoint inhibitor and a VEGF inhibitor in the advanced and/or metastatic setting
 - Patients were heavily pretreated with a median of 3 prior lines of therapy
 - HLA independent dosing (standard for AlloCAR T™)
- Median follow-up time: 7.8 months

* One patient withdrew consent prior to treatment

** Of the 19 patients dosed with ALLO-316, 18 had at least 1 tumor assessment

Dose exploration continuing

AACR Data Extract: March 23, 2023

ALLO-316: Safety and Tolerability Consistent with Autologous CAR T

TEAEs of Interest ^b	Patients who received ALLO-316 (n=19)	
	All Grades n (%)	Grade 3+ n (%)
Infusion-Related Reaction	1 (5)	0
CRS	11 (58)	1 (5)
ICANS	0	0
GvHD	0	0
Neurotoxicity ^c	13 (68)	2 (11)
Infection ^d	8 (42)	4 (21)
Prolonged Grade 3+ Cytopenia ^e	N/A	3 (16)

- One DLT event (Gr 3 type 2 autoimmune hepatitis^a) in DL2 FCA
- CRS was low grade (except 1 Gr 3) and responded to standard treatment
- No reports of ICANS; 2 patients were noted to have Gr 3 neurotoxicity (syncope and fatigue, respectively)
- No GvHD observed
- One patient had Gr 5 respiratory failure in the setting of COVID-19 infection deemed unrelated to study treatment
- Infections now managed with enhanced prophylaxis

^a DLT initially reported as elevated AST/elevated ALT.

^b 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.

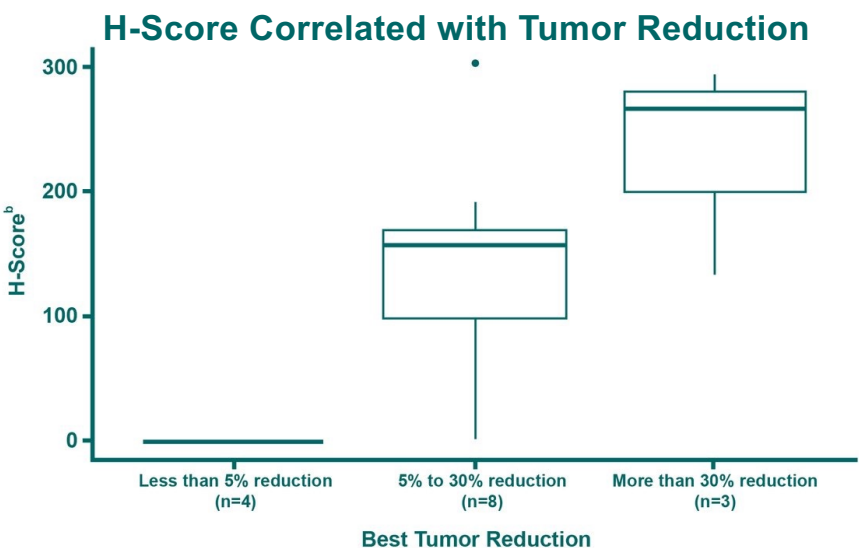
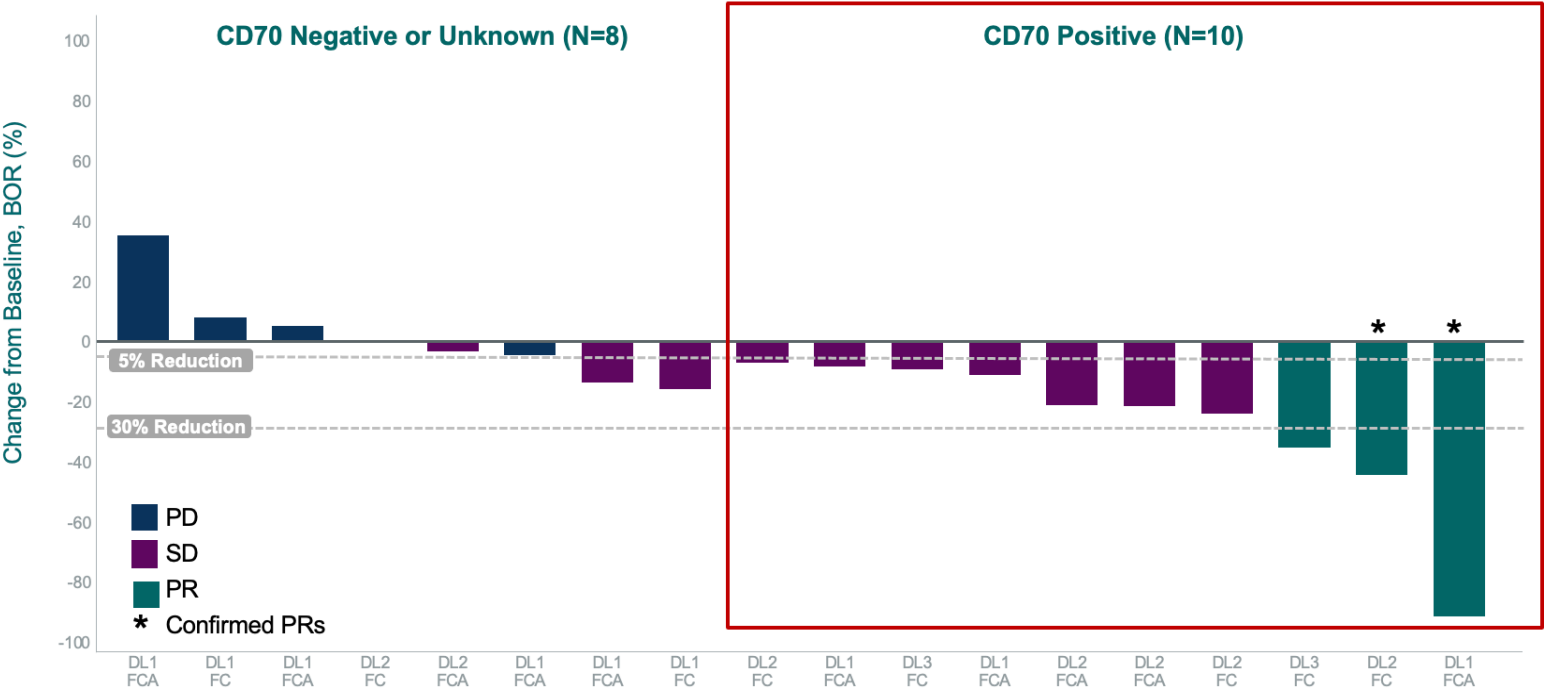
^c Neurotoxicity including ICANS: includes preferred terms (PT) from the Allogene MedDRA Query (AMQ) for Neurologic toxicities including ICANS, a broad search basket of over 200 PTs selected to identify the medical concept. The majority of neurotoxicities are fatigue and headache.

^d The 4 Gr 3+ infections comprised 2 bacterial (PICC line infection and UTI), 1 fungal (bronchopulmonary aspergillosis) and 1 viral (Gr 5 respiratory failure in setting of COVID-19). At the time of data cut, one additional Gr 3 fungal sinusitis had not yet been recoded as disease progression.

^e Prolonged Cytopenia at Day 28, includes Grade 3 or above neutropenia, thrombocytopenia, anaemia or pancytopenia which is present at Study Day 28.

ALLO-316: Demonstrates Feasibility to Treat Solid Tumors

TRAVERSE continues to explore cell dose and lymphodepletion regimen in CD70+ RCC patients

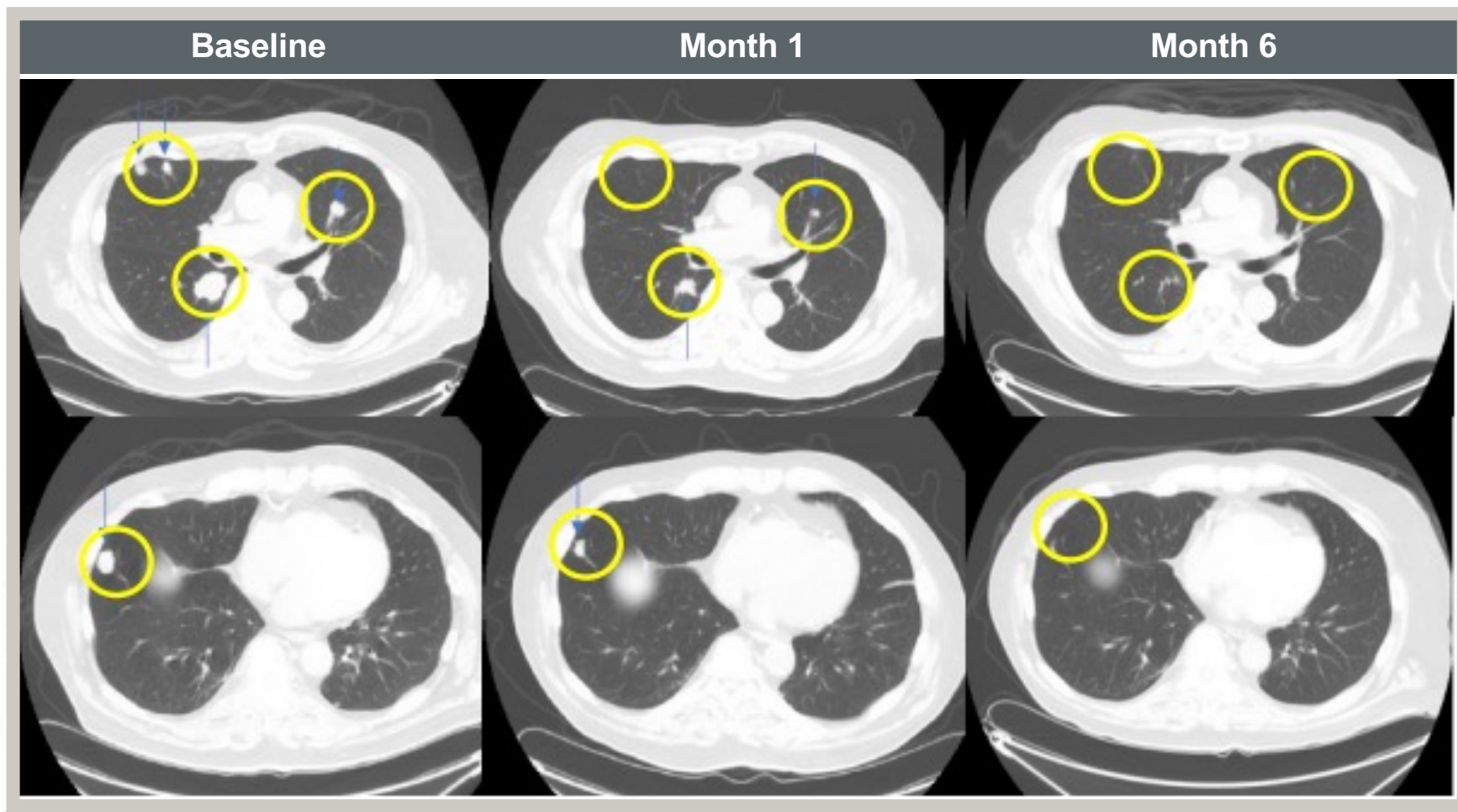


Response Rates Correlate with CD70 Expression

- All Patients Evaluable for Efficacy: 17% ORR and 89% disease control rate (DCR)
- CD70+ Patients: 30% ORR and 100% DCR

AACR Data Extract: March 23, 2023

ALLO-316 Case Study 1: Deepening Response After Lowest Tested Cell Dose

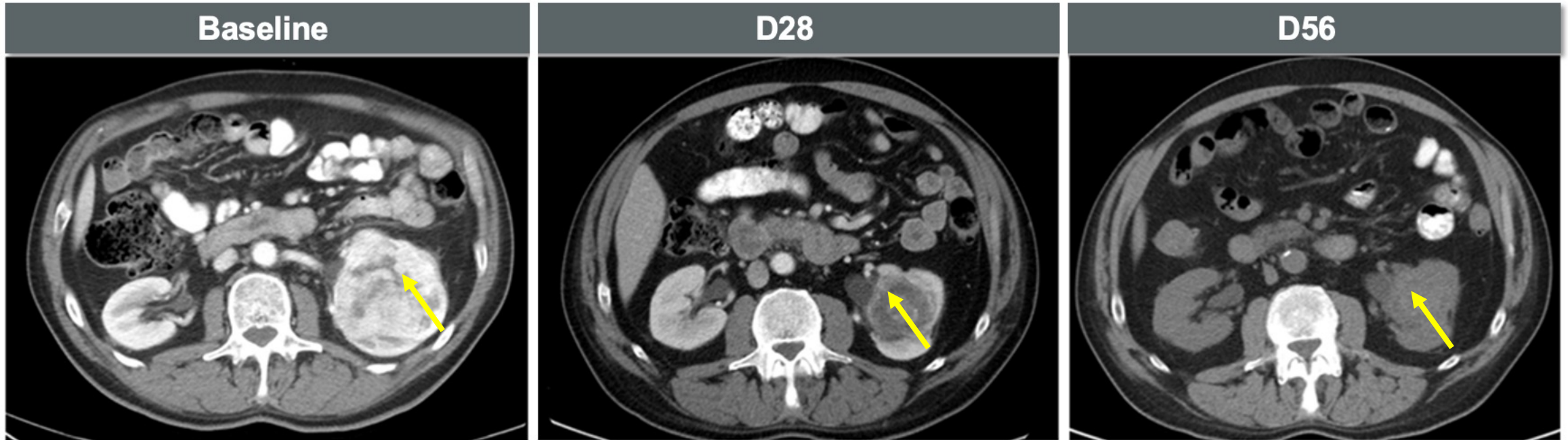


Partial Response

- 68-year-old man with metastatic RCC to the lungs, refractory to checkpoint blockade, angiogenesis inhibitors
- Treated with FCA and 40M CAR+ cells
- Responded with initial partial response at Month 1 that continued to deepen through Month 6
- Demonstrates durability of response with ALLO-316

AACR Data Extract: March 23, 2023

Case Study 2: ALLO-316 Can Target Primary Renal Tumors



Stable Disease

- 70-year-old male with RCC metastatic to adrenal and bone, refractory to axitinib and pembrolizumab
- Treated with FCA and 80M CAR+ cells
- Best Overall Response of Stable Disease with 45% decrease in size of primary left kidney tumor

AACR Data Extract: March 23, 2023



CD70 Dagger™ Technology

Dagger™: A Next-Gen Approach for Improved Cell Expansion

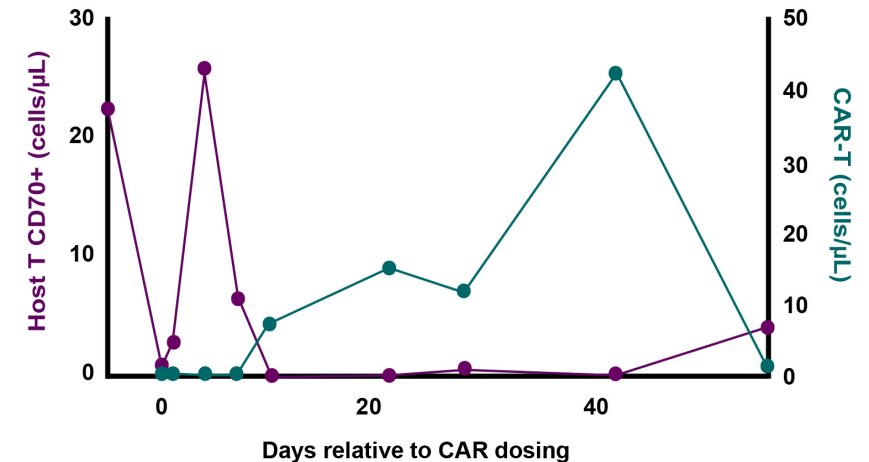
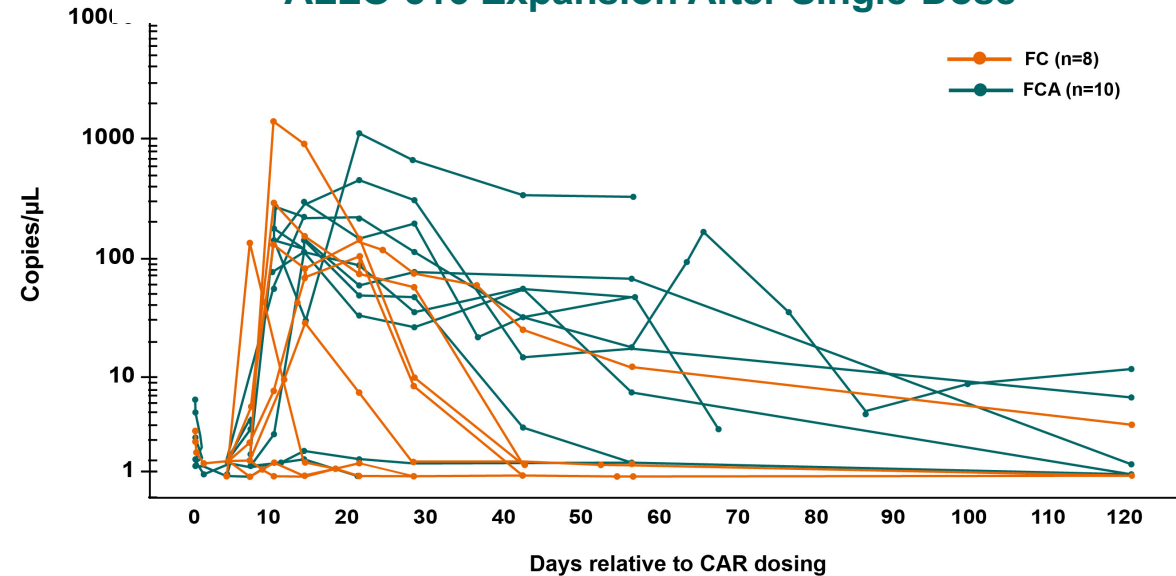
Potentially Foundational CD70 Dagger™ Technology Platform Designed To Control Immune Rejection

- Dagger™ Platform takes advantage of CD70 on activated host T cells to enhance CAR T cell expansion and persistence
- CAR T cells armed with Dagger™ receptors can eradicate alloreactive host T cells *in vitro*, and may reduce host rejection *in vivo*

ALLO-316 Phase 1 Data Provides Proof-of-Concept

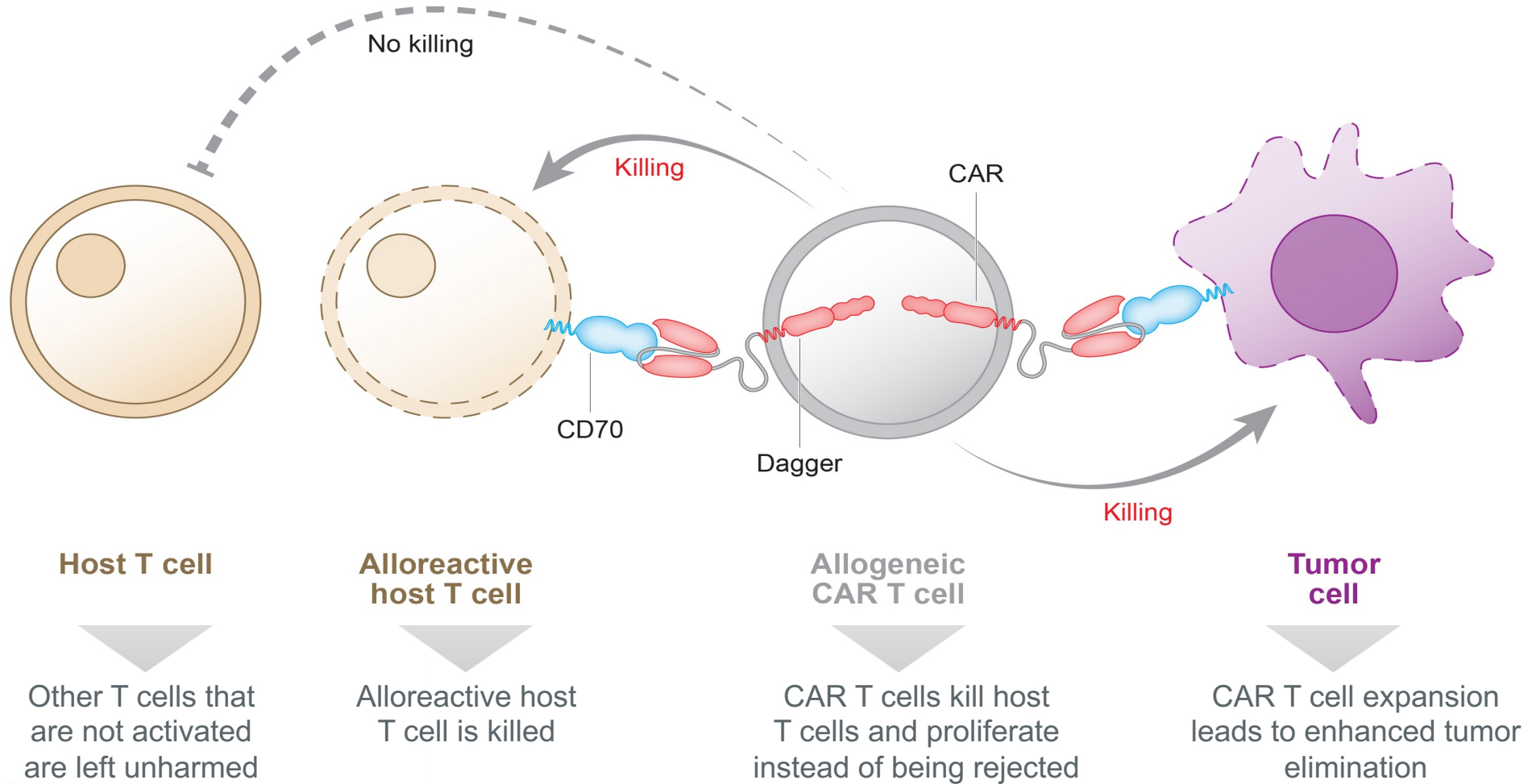
- Robust CAR T expansion observed in TRAVERSE study
 - Following ALLO-316 infusion, alloreactive host T cells upregulate CD70 by Day 4
 - ALLO-316 expands by Day 10 and eliminates CD70+ host T cells while CD70- host T cells are spared
 - Host CD70+ T cells recover as ALLO-316 contracts

ALLO-316 Expansion After Single-Dose



Dagger™ Mechanism Specifically Targets Alloreactive Host T Cells

Deploys Anti-CD70 to Protect AlloCAR T Cells from Immune Rejection





BCMA Program

ALLO-715: First & Only Allogeneic CAR T Study to Establish Proof-of-Concept in MM

BCMA Program Evolution



Established Proof-of-Concept

- First AlloCAR T to establish responses in myeloma comparable to an approved autologous CAR T therapy



Manufacturing

- Reviewing opportunity to improve manufacturing processes across BCMA candidates for optimal performance



Next Steps

- ALLO-715 Phase 1 complete
 - Data published in *Nature Medicine*
 - Manufacturing process optimization underway
- ALLO-605 TurboCAR™ in process optimization (IGNITE trial)

ALLO-715 UNIVERSAL Trial

Expansion Cohort Demonstrated Deep and Durable Responses

- Single Infusion of 320M CAR+ cells with FCA60 Lymphodepletion Resulted in 67% ORR and 42% VGPR+
 - 100% of VGPR+ Patients Minimal Residual Disease
 - Median DOR of 9.2 months

Manageable Safety Profile Across All Doses:

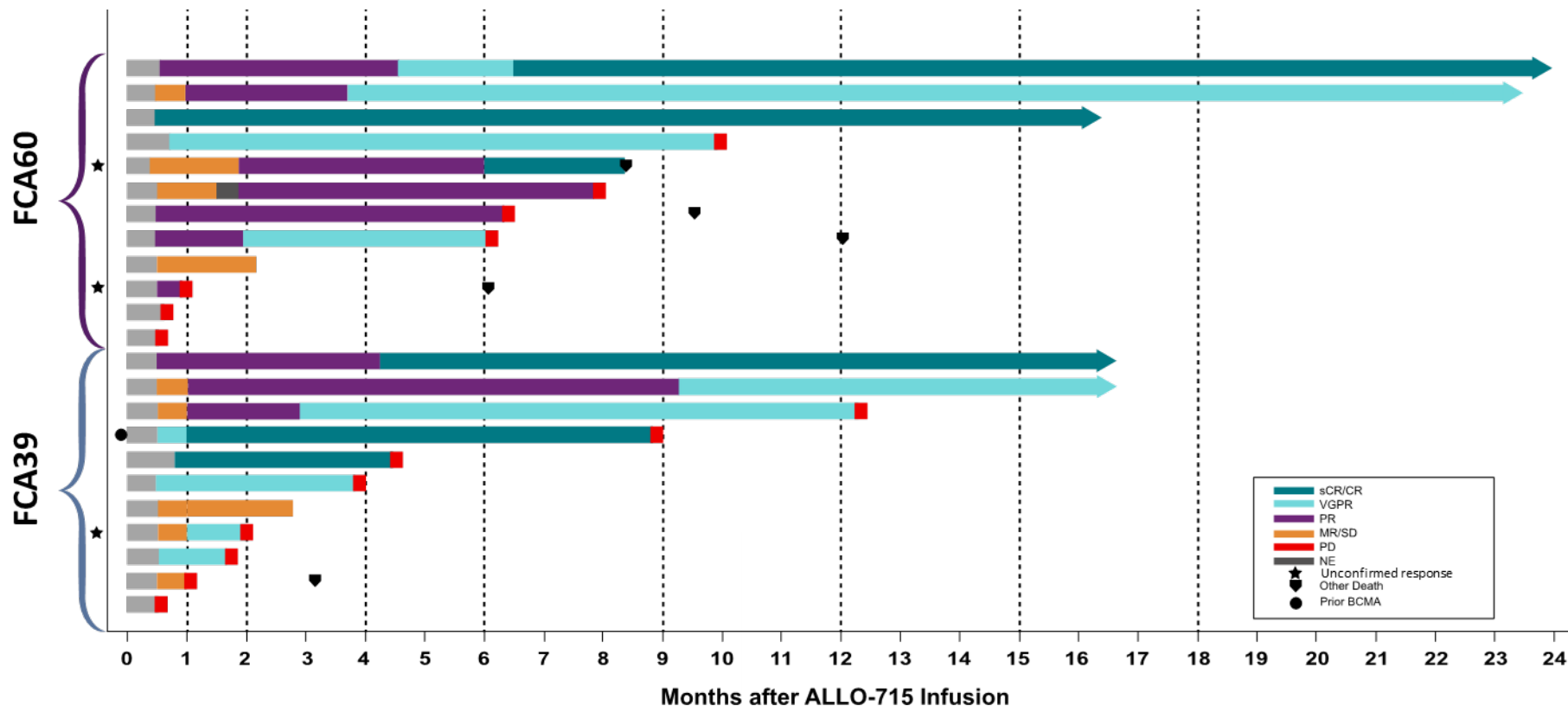
- No GvHD
- Low-grade and reversible neurotoxicity; one Gr 2 ICANS
- Low-grade CRS with only one Gr 3
- Low use of tocilizumab (32%) and steroids (25%)

Treatment within 5 Days of Enrollment; No Bridging Therapy

- 92% of enrolled patients received product
- 100% of infused product manufactured & released per product specifications

Data Cutoff Date: October 11, 2022; 5 patients excluded from efficacy analysis have best response range from SD to PR

ALLO-715 Expansion Cohort Shows Durable Responses



- In FCA60 efficacy evaluable set, the median DOR was 9.2 months with the longest ongoing response at 24 months
- Responses were seen across all subgroups including patients with high-risk cytogenetics and extra medullary disease

* Two subjects had responses of PR which were never confirmed; one of them is categorized as best response PD and the other as best response SD. One subject had a response of VGPR which was never confirmed and is categorized as a best response of PR.

A Single Dose of ALLO-715 Has Potential to Address Patient Need

Treatment Administration and Efficacy (mITT)	ALLO-715 (320M & FCA60) n=12 ¹	Tecvayli (teclistamab) ²	Abecma® (Ide-cel) ³	Carvykti (Cilta-cel) ⁴
ORR (mITT)	67%	62%	72%	98%
VGPR+ Rate (mITT)	42%	57%	53%	95%
CR/sCR Rate (mITT)	17%	28%	28%	78%
MRD ⁵ - in VGPR+	100%	69%	75%	92%
Duration of Response (median)	9.2 mo ⁶	Not reached	11.0 mo	21.8 mo
CRS (Gr3+)	0%	< 1%	9%	5%
Neurologic Toxicity (Gr3+)	0%	2.4%	4%	11%
Infection (Gr3+)	35%	39.2%	26%	27%
Grade 5 Adverse Events	6%	5%	6%	9%
% enrolled who did not receive intended cell product ⁷	11%	Discontinuation (AE) 1.2% Dose interruption (AE) 73%	26%	29%
Days to treatment initiation ⁸	5	Not reported	33	32
Required bridging therapy	0%	NA	87%	75%

¹ data through 11 Oct 2022; ² Tecvayli USPI and Usmani, 2021; ³ Abecma USMI and Munshi, 2021; ⁴ USPI and Berdeja, 2021; ⁵ For UNIVERSAL, MRD status is evaluated in subjects with VGPR+; for Tecvayli, MRD is reported in 26 subjects with CR or better; for Abecma, MRD is reported among subjects with CR or sCR; ⁶ 5 subjects remain in response between 17 and 24 months; ⁷ cell product that is successfully manufactured and meets release specifications; for Abecma 11 patients did not receive treatment and 24 patients received out of specification product; for Carvykti, 16 patients did not receive Carvykti due to progressive disease and 17 patients received out-of-specification product; ⁸ for ALLO-715, time from enrollment to start of lymphodepletion. Two patients were not treated due to rapidly progressing disease; for Abecma, time from apheresis to cell product availability (includes 87% of patients who received bridging therapy)
FOR ILLUSTRATIVE PURPOSES ONLY: no head-to-head clinical trial has been conducted. Differences exist between trial designs and subject characteristics, and caution should be exercised when comparing data across studies.

Realizing the Potential of Allogeneic CAR T through Innovation and Execution

Our goal is to make CAR T available to all patients in need

CD19 Best & First-in-Class Profile

ALLO-501A

- First potentially pivotal Ph2 trial
- 67% ORR and 58% CR rate with single dose and FCA90 lymphodepletion
- Durability moves the field beyond proof-of-concept and validates Allogene's platform



BCMA Potential First-in-Class

ALLO-715

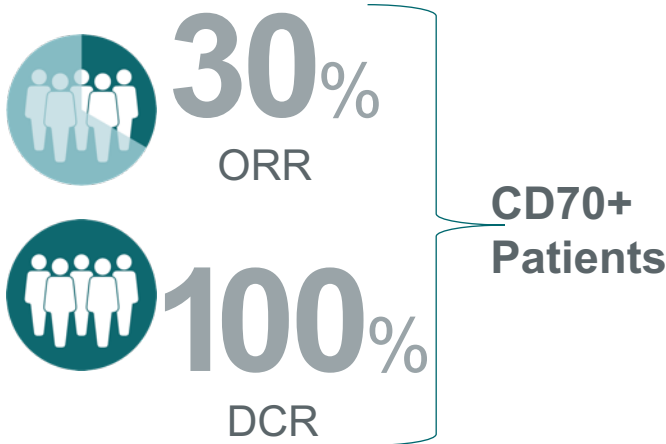
- First & only allogeneic CAR T trial to demonstrate potential in MM
- Expansion cohorts deliver response rates that support advancement
- Reviewing manufacturing process improvements across BCMA candidates for optimal performance



CD70 Expanding into Solid Tumors

ALLO-316

- Demonstrates feasibility of an allogeneic CAR T to treat RCC
- Induced Anti-Tumor Activity in Patients with CD70 Expressing RCC with Deepening Responses Over Time



CD19 Data Cutoff Date: October 25, 2022; ALLO-715 Data Cutoff Date: October 11, 2022; ALLO-316 Data Extract: November 7, 2022

The Next Revolution in Cell Therapy

Leading the Revolution from CAR T *Therapies* to CAR T *Products*

Allogene therapies utilize TALEN® gene-editing technology pioneered and owned by Cellectis. ALLO-501 and ALLO-501A are anti-CD19 AlloCAR T™ therapies being jointly developed under a collaboration agreement between Servier and Allogene based on an exclusive license granted by Cellectis to Servier. Servier grants to Allogene exclusive rights to ALLO-501 and ALLO-501A in the U.S. Allogene has an exclusive license to the Cellectis technology for allogeneic products directed at BCMA, FLT3, DLL3, CD70 and Claudin 18.2.

