# The Next Revolution in Cell Therapy

## Leading Today, Creating Tomorrow

February 25, 2021

# Legal Disclaimers

To the extent statements contained in this Presentation are not descriptions of historical facts regarding Allogene Therapeutics, Inc. (“Allogene,” “we,” “us,” or “our”), they are forward-looking statements reflecting management’s current beliefs and expectations. Forward-looking statements are subject to known and unknown risks, uncertainties, and other factors that may cause our or our industry’s actual results, levels or activity, performance, or achievements to be materially different from those anticipated by such statements. You can identify forward-looking statements by words such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “will,” “would” or the negative of those terms, and similar expressions that convey uncertainty of future events or outcomes. Forward-looking statements contained in this Presentation include, but are not limited to, statements regarding: clinical outcomes, which may materially change as patient enrollment continues and more patient data become available, the timing and ability to progress the clinical trials of ALLO-501, ALLO-501A and ALLO-715, the timing and ability to initiate a clinical trial of ALLO-316, the timing and ability to file an IND and initiate a clinical trial of ALLO-605, the ability to manufacture AlloCAR T™ therapies for use in clinical trials, and the potential benefits of AlloCAR T™ therapy. Various factors may cause differences between Allogene’s expectations and actual results as discussed in greater detail in Allogene's filings with the Securities and Exchange Commission (SEC), including without limitation in its Form 10-K for the year ended December 31, 2020.

Caution should be exercised when interpreting results from separate trials involving separate product candidates. There are differences in the clinical trial design, patient populations, and the product candidates themselves, and the results from the clinical trials of autologous products may have no interpretative value on our existing or future results.

Except as required by law, we undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise. This Presentation shall not constitute an offer to sell or the solicitation of an offer to buy securities, nor shall there be any sale of securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

# Allogene: Singular Focus on Allogeneic Cell Therapy

## SUCCESSFUL TRACK RECORD OF EXECUTION

| 2018 Allogene Launch | Manufacturing Experience | Clinical Trial Execution | Breaking Down Allogeneic Hurdles | Demonstrating Efficacy | Pipeline Progress 2021 |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| From launch to leadership in less than 3 years<br><br>Raised $1.5B in aggregate capital | Delivered uninterrupted supply for all clinical trials<br><br>Newark facility on track to begin production in 2021 | Leading the field with 75+ patients treated with AlloCAR T™<br><br>2 key Phase 1 datasets presented in 2020 at major medical meetings | Controlling Graft vs Host Disease (GvHD) and cell rejection<br><br>Creating a window of cell persistence | Complete Responses and Minimal Residual Disease (MRD) responses observed<br><br>Proof-of-Concept for proprietary lymphodepletion platform | 5 clinical trials planned in 2021, including:<br><br>1st pivotal trial<br>1st solid tumor trial<br>1st combo trial<br>1st TurboCAR™ trial |



Allogene THERAPEUTICS

# Deep AlloCAR T™ Pipeline Targeting Vast Array of Tumor Types

| CATEGORY | | PROGRAM | PRE-CLINICAL | PHASE 1 | PHASE 2/3[2] |
|---|---|---|---|---|---|
| Hematological Malignancies | CD19 | **ALLO-501 (NHL)[1]** | | | |
| | | **ALLO-501A (NHL)[1]** | | | |
| | BCMA | **ALLO-715 (MM)** | | | |
| | | **ALLO-715 + nirogacestat (MM)[3]** | | | |
| | | **ALLO-605 (TurboCAR™/MM)** | | | |
| | | **ALLO-316 (CD70/AML)** | | | |
| | | **ALLO-819 (FLT3/AML)** | | | |
| Solid Tumors | | **ALLO-316 (CD70/RCC)** | | | |
| | | **DLL3 (SCLC)** | | | |
| | | **10 Undisclosed Targets** | | | |
| Lymphodepletion Agent | | **ALLO-647 (Anti-CD52 mAb)[4]** | | | |

*[1] Servier holds ex-US commercial rights*
*[2] Phase 3 may not be required if Phase 2 is registrational; Initiation for ALLO-501A Phase 2 trial expected 2H 2021*
*[3] Allogene Sponsored trial in combination with SpringWorks Therapeutics*
*[4] ALLO-647 intended to enable expansion and persistence of allogeneic CAR T product candidates*



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# Innovating CAR T Therapies to Potentially Expand Access & Reduce Cost

## Cost

- Scalable and efficient manufacturing
- Potential to treat 100+ patients from a single manufacturing run
- Opportunity to reduce ancillary cost of care associated with autologous therapy

## Innovation

- Multiplex gene engineering/editing capabilities
- Opportunity for product optimization

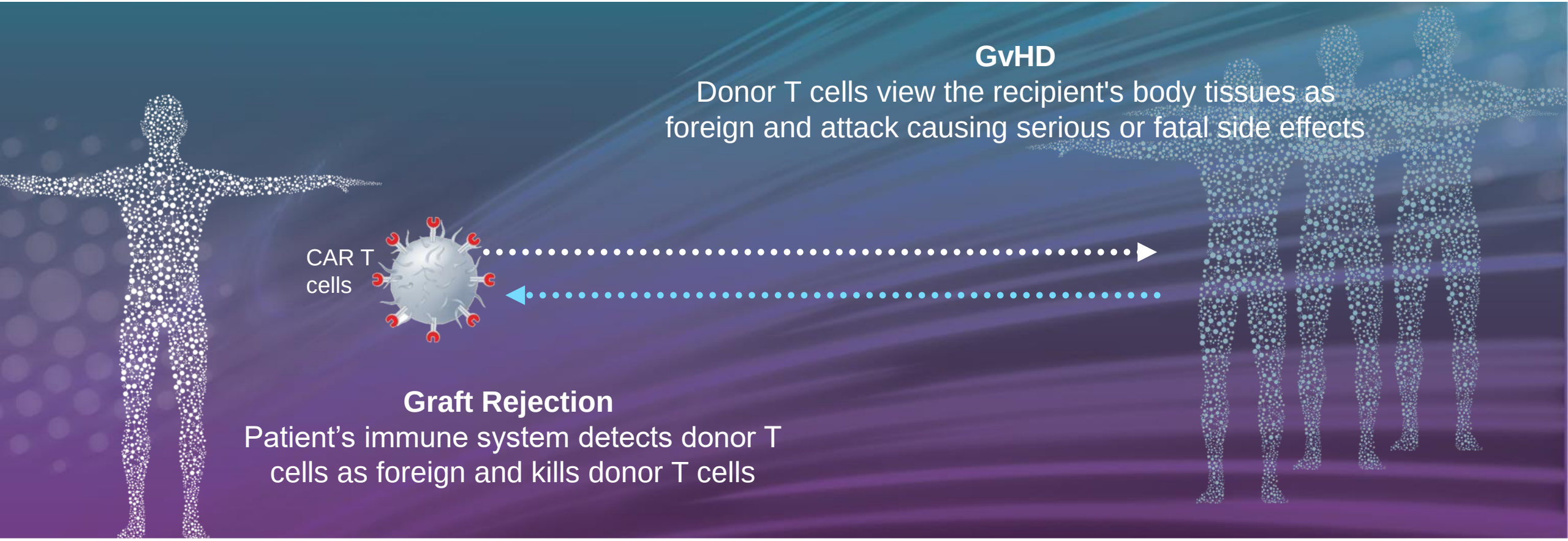
## Access

- Potential to treat all eligible patients
- Repeat dosing, if needed
- No need for complex logistics or bridging therapy

## Speed/Reliability

- “Off the shelf” for on demand treatment
- Less product variability, made from healthy T cells

# Defying Immunity: Overcoming GvHD and Graft Rejection




**Allogeneic cell therapy engages the fundamental immunological process of Self vs. Non-Self recognition**



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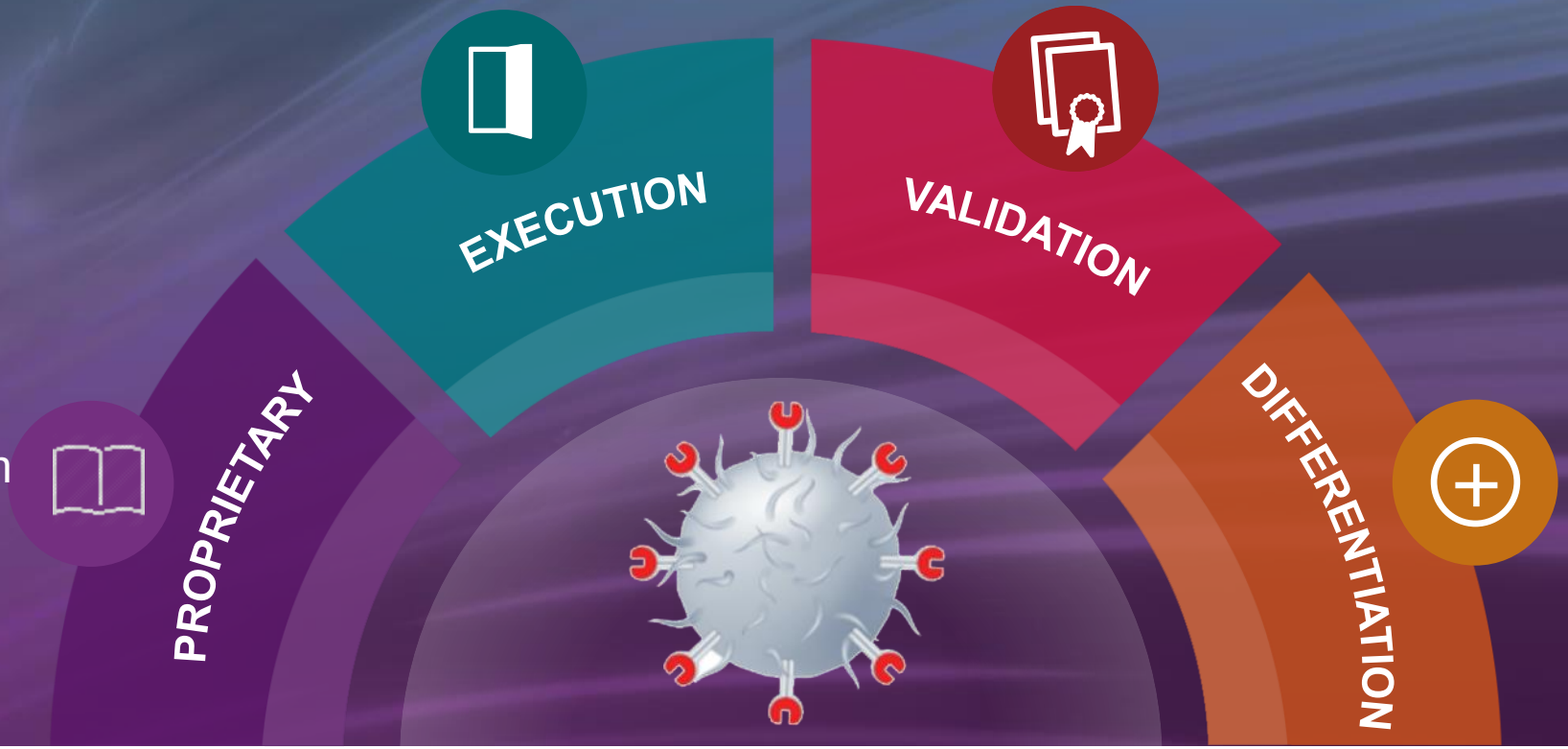
# ALLO-647 Anchors Novel, Proprietary Approach to Overcoming Rejection

Developed anti-CD52 mAb for use across AlloCAR T pipeline

Phase I trials have demonstrated the ability to selectively enhance lymphodepletion

IP covering CD52 gene knockout in combination with an anti-CD52 mAb

Controlling rejection enables greater CAR T cell expansion and persistence






Allogene THERAPEUTICS

# Industrializing Allogeneic Cell Therapy Production: Strategy

- Singularly focused AlloCAR T platform development enables speed and minimizes cost
- Ownership of manufacturing and testing allows improved process optimization, and control regulatory and compliance
- Investment in partnerships with critical suppliers ensures availability of emergent, high-demand materials
- ALLO-647 development and production, with dedicated ALLO oversight, preserves focus on AlloCAR T's
- Leveraging QTPP framework for product understanding to improve process performance and supports comparability
- COGM is shaped by infrastructure, and operationalization choices

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# Industrializing Allogeneic Cell Therapy Production: Infrastructure


## Cell Forge 1 (Newark, CA)

- New state-of-the-art facility
- Designed for clinical and commercial manufacturing, analytical testing and distribution of cell therapies
- Construction complete in 2020, first GMP production 2021

## South San Francisco Facilities

- Manufacturing process and product development
- Analytical methods for process and product understanding and release
- Quality Assurance and Quality Control

## External Network

- Broad CMO and supplier network
- Incorporating external expertise for starting materials, drug substance and drug product manufacturing
- Packaging, labeling, logistics and clinical distribution



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# CD19 Program: Advancing ALLO-501A to Potential Pivotal Study
*Potential to be the First Allogeneic CAR T in Phase 2*

## ALLO-501 ALPHA Ph1 Trial | Initial Data: ASCO 2020 | Next Update Expected Q2 2021 (ASCO 2021)

**Early efficacy competitive with autologous CAR T**: 83% ORR and 67% CR with higher dose ALLO-647 (N=6)

**Well tolerated**: No GvHD and manageable CRS. Early safety data compared favorably to autologous CAR T

**On demand dosing**: 5 days from enrollment to treatment vs. 17-54 days for autologous therapies

**Biomarker validation**: Correlations observed with ALLO-647 lymphodepletion, ALLO-501 cell expansion, and tumor response

**Further exploration of dosing**: Retreatment and consolidated dosing to potentially optimize outcomes

| Cell Dose and LD regimen | ALLO-501[1] ALLO-647 90mg (N=6) | Autologous Ph1 Trials in NHL[2] | Autologous Ph2 Trials in NHL[3] |
|---|---|---|---|
| ORR, n (%) | 5 (83%) | 64-80% | 50-73% |
| CR, n (%) | 4 (67%) | 56-60% | 32-53% |

[1] *ASCO June 2020; Autologous CAR T naïve patients*
[2] *Kymriah and liso-cel trials include FL and MCL patients; ASH 2015; Schuster, NEJM, 2019; Abramson, ASH 2019*
[3] *Yescarta, Kymriah FDA labeling information and Abramson ASH 2019; Based upon mITT analyses*

| AE of Interest (≧Gr3) | ALLO-501 Ph1 (N=22) | axi-cel Ph2* (N=101) | tisa-cel Ph2* (N=111) | liso-cel Ph2* (N=269) |
|---|---|---|---|---|
| Cytokine Release Syndrome | 5% | 13% | 23% | 2% |
| ICANS | - | | | |
| Neurologic Events | | 31% | 18% | 10% |
| Graft-versus-Host Disease | - | - | - | - |
| Infection | 9% | 23% | 25% | 12% |
| Neutropenia | 64% | 93% | 81% | 60% |
| Infusion Reaction | 5%** | - | - | - |

** Neelapu NEJM 2017, Schuster NEJM 2019, and Abramson ASH 2019*
*** Attributed to ALLO-647*

## ALLO-501A ALPHA2 Ph1 Trial | Initial Data: Expected Q2 2021 | Anticipate Pivotal Trial Initiation: 2H 2021

# ALPHA2 Study Design and Endpoints

## Phase 1/2, Open-label, Multicenter Dose Escalation and Dose Expansion Study

**Primary Endpoints**

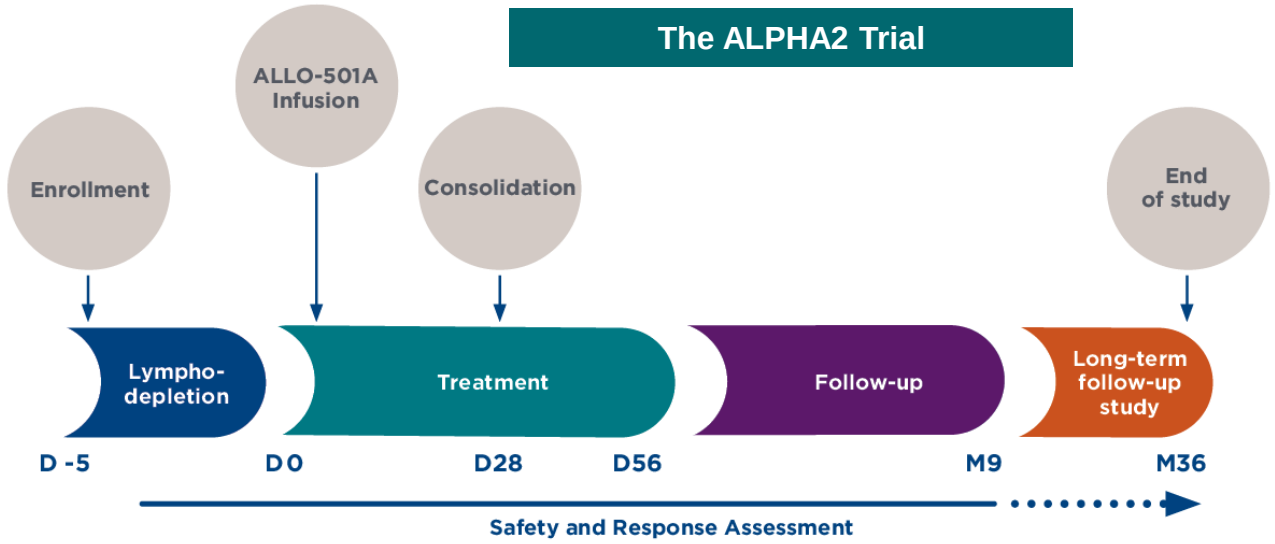
- Safety and dose-limiting toxicity of ALLO-647/Flu/Cy followed by ALLO-501A
- Overall response rate by central imaging review

**Key Secondary Endpoints**

- Overall response rate by investigator assessment
- ALLO-501A cell kinetics
- ALLO-647 PK

**Key Eligibility Criteria**

- R/R LBCL
- At least 2 prior lines of therapy, including an anthracycline and anti-CD20 monoclonal antibody
- ECOG 0 or 1
- Prior autologous CAR T allowed if tumor remains CD19+ and patient had a CR ≥ 16 weeks
- Patients with Donor Specific Antibodies are excluded




| | DL1 (N=1) | DL2 | DL2 Consolidation | DL3 |
|---|---|---|---|---|
| Cell Dose | 40 x $10^6$ $CAR^+$ T cells | 120 x $10^6$ $CAR^+$ T cells | 120 x $10^6$ $CAR^+$ T on D0, and D28 for SD or better | 360 x $10^6$ $CAR^+$ T cells |

- Lymphodepletion Regimen
  - Fludarabine (Flu), Cyclophosphamide (Cy) and ALLO-647



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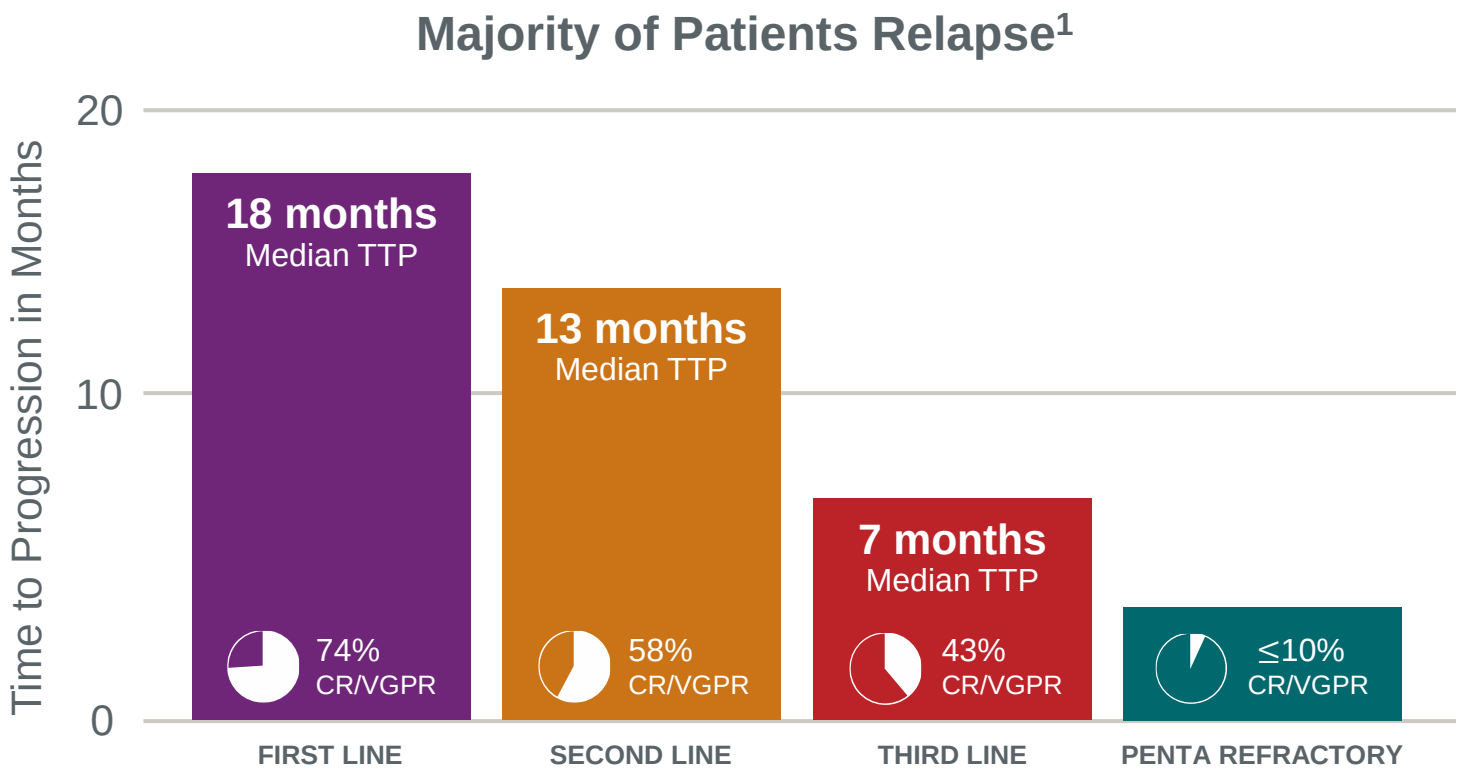
# Why Allogeneic Cell Therapy Matters in Multiple Myeloma

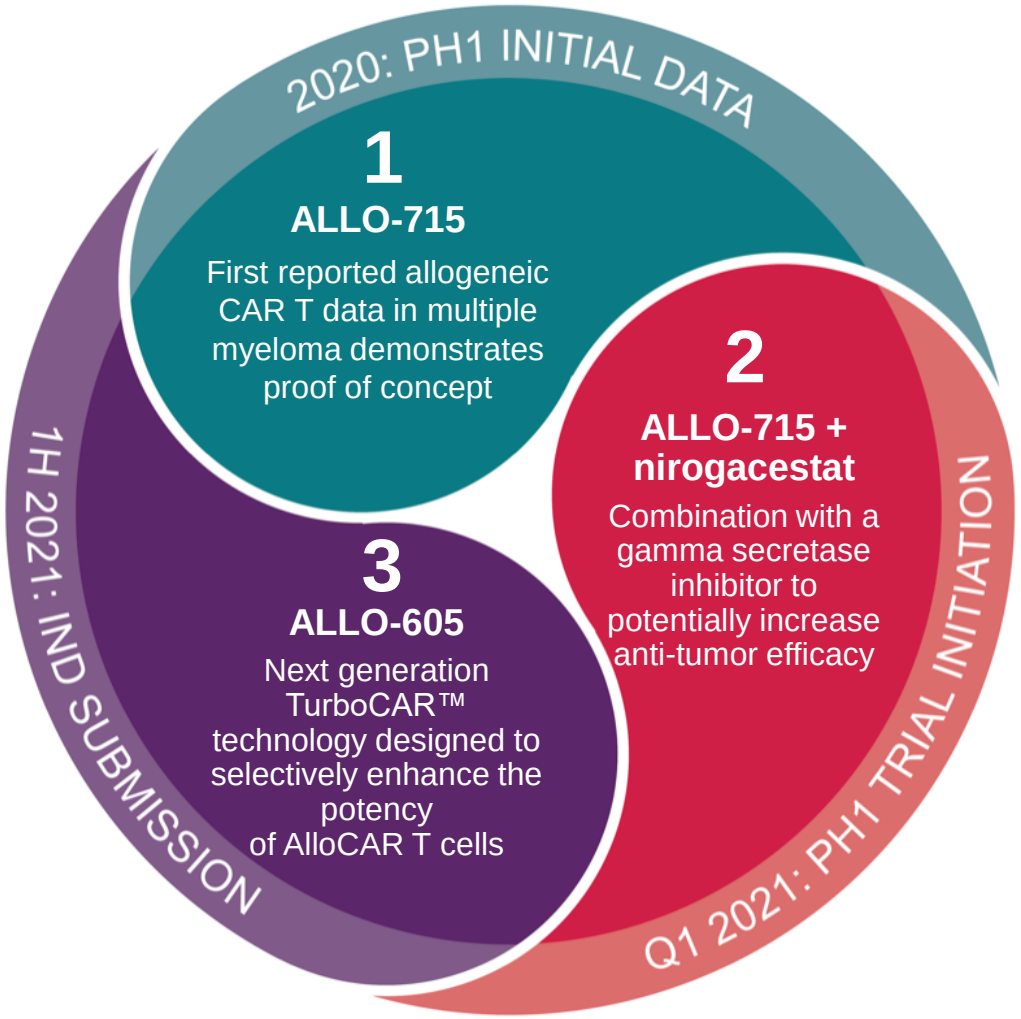
- Multiple myeloma is a progressive disease. Prognosis for patients worsens over time
- Bridging therapy to “control” the disease may increase some cumulative or synergistic toxicities for the patients[2]

*Time is of the essence for patients with rapid progression*




[1]Bird SA, Boyd K. Palliat Care Soc Pract. 2019;13:1-13
[2]Zheng Ping-Pin, et al. Drug Discovery Today June 2018; 23:6; 1175-82
[3] Gandhi, et al., *Leukemia*. 2019 September ; 33(9): 2266–2275. doi:10.1038/s41375-019-0435-7; TTP based upon conditional mPFS reported, VGPR based on interpolated values

# Building an Anti-BCMA AlloCAR T Franchise in Multiple Myeloma



# ALLO-715: First AlloCAR T To Demonstrate Feasibility in Myeloma

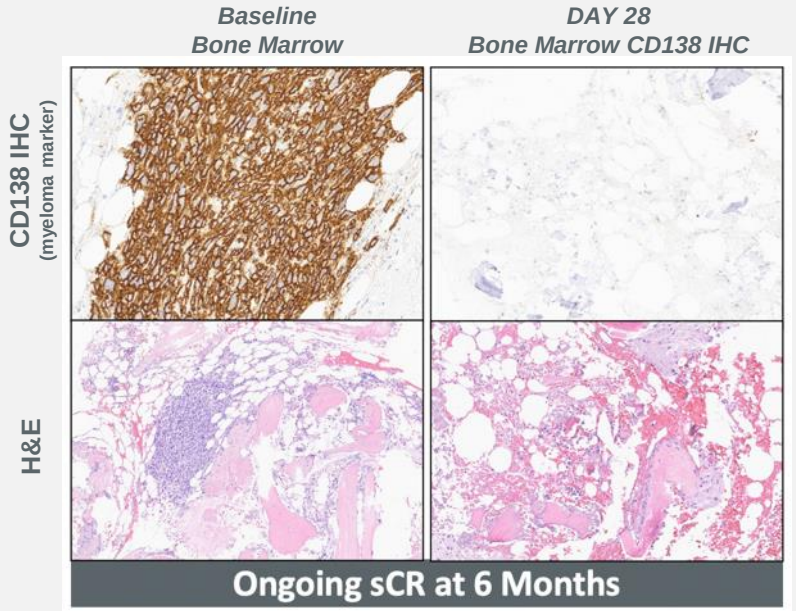
**ALLO-715 UNIVERSAL Ph1 Trial: *Initial Data Readout: ASH 2020***
**Next Steps: *Explore further dose escalation and combination with nirogacestat***

**Clear benefits associated with an off-the-shelf therapy:**
- ~90% of patients treated within 5 days of study enrollment
- Obviates need for bridging therapy prior to dosing

**Well tolerated across dose levels:**
- No GVHD or neurotoxicity (ICANS); manageable grade 1 or 2 CRS
- Infection rate on par with other studies in advanced myeloma

**Dose dependent ALLO-715 activity observed in heavily pretreated, refractory patients**
- ALLO-715 cell persistence observed through month 4
- 320M cell dose of ALLO-715 (DL3) with FCA lymphodepletion associated with a 60% Overall Response Rate (ORR)
- 5 of 6 VGPR+ patients assessed for MRD status; all were negative

**ALLO-715 Case Study: Ability to Achieve a Durable Deep Response**




9 prior lines of therapy, progressing on last line of therapy

ASH 2020; image on file

# ALLO-715: Initial Data Creates Pathway for Allogeneic CAR T in MM

## Initial Safety Compared to BCMA Directed Therapies

| | ALLO-715 Ph1 (N=31)[1] | Ide-Cel 300/450M N=128[2] | Orva-Cel 300/450/600M N=62[3] | Cilta-Cel 0.75M/kg N=29 [4] |
|---|---|---|---|---|
| **Cytokine Release Syndrome (CRS)** | **45%** | 84% | 89% | 93% |
| **CRS (Grade ≥3)** | **0** | 5.5% | 3% | 7% |
| **Neurologic Toxicity** | **0** | 18% | 13% | 10% |
| **Neurologic Toxicity (Grade ≥3)*** | **0** | 3% | 3% | 3% |
| **Infection (Grade ≥3)** | **16%** | NR | 13% | 21% |
| **Neutropenia (Grade ≥3)** | **52%** | 89% | 90% | 100% |
| **Death from AEs** | **3%** | 3% | 3% | 8% |

*1 ASH 2020; 2 Munshi, ASCO 2020 (Ide-cel); 3 Mailankody, ASCO 2020 (Orva-cel) ; 4 Madduri, ASH 2020 Abstract*

## Initial Responses Compared to BCMA Directed Therapies

| Cell Dose & LD regimen | ALLO-715 320M & FCA (N=10)[1] | Ide-Cel (BB/BMS) 300/450M N=124[2] | Orva-Cel (Juno/BMS) 300/450/600M N=62[3] | Cilta-Cel (JNJ) 0.75M/kg N=97[4] |
|---|---|---|---|---|
| **ORR, %** | **60%** | 73% | 92% | 95% |
| **VGPR+ Rate, %** | **40%** | 53% | 68% | 88% |
| **MRD- Rate, % (N Evaluated)** | **100% (4/4)** | 78% (80/102) | 84% (21/25) | 94% (49/52) |

*1 ASH 2020; Responses included 2 subjects with only day 14 assessment and 1 subject who converted from a confirmed PR to VGPR (pending confirmation). ; 2 Munshi, ASCO 2020 (Ide-cel); 3 Mailankody, ASCO 2020 (Orva-cel) ; 4 Madduri, ASH 2020 Abstract*

# UNIVERSAL: ALLO-715 + Nirogacestat Cohort

**Primary Endpoints**

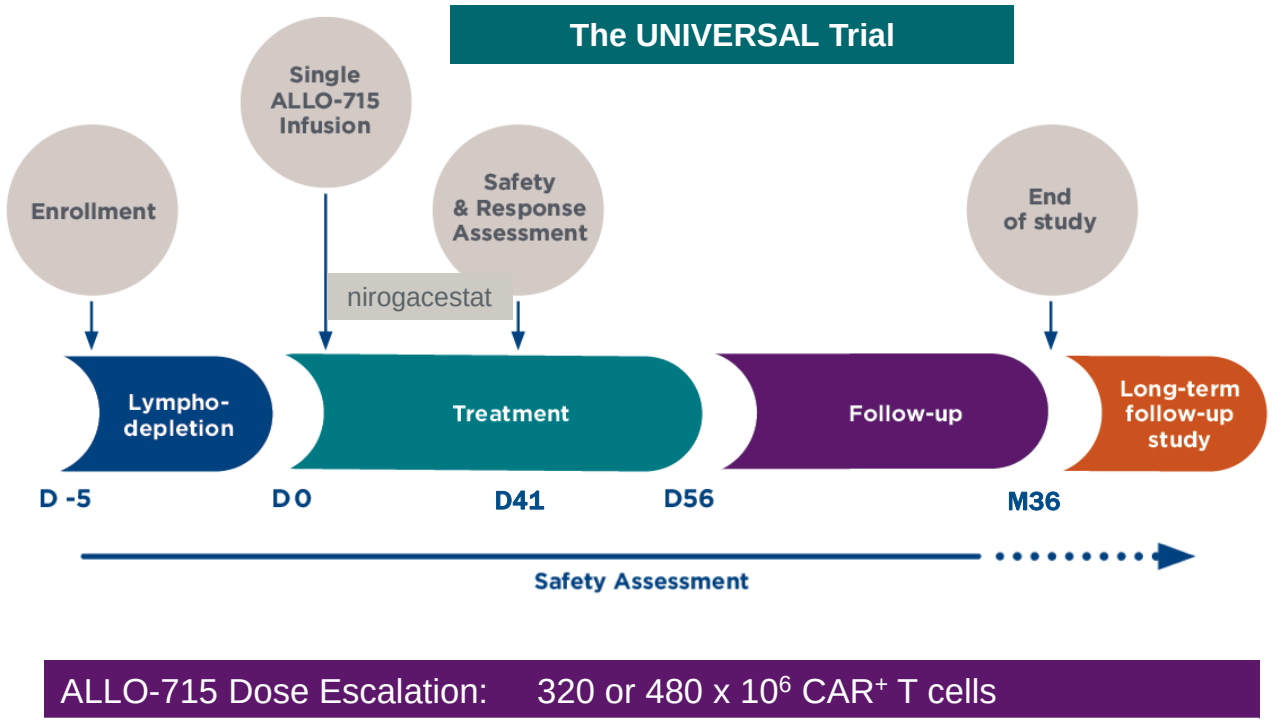
- Safety and tolerability of ALLO-715 in combination with nirogacestat

**Secondary Endpoints**

- Anti-tumor activity and cellular kinetics of ALLO-715 in combination with nirogacestat
- ALLO-647 and nirogacestat pharmacokinetics
- Evaluate the expression of BCMA in bone marrow plasma cells with and without nirogacestat

**Key Eligibility Criteria**

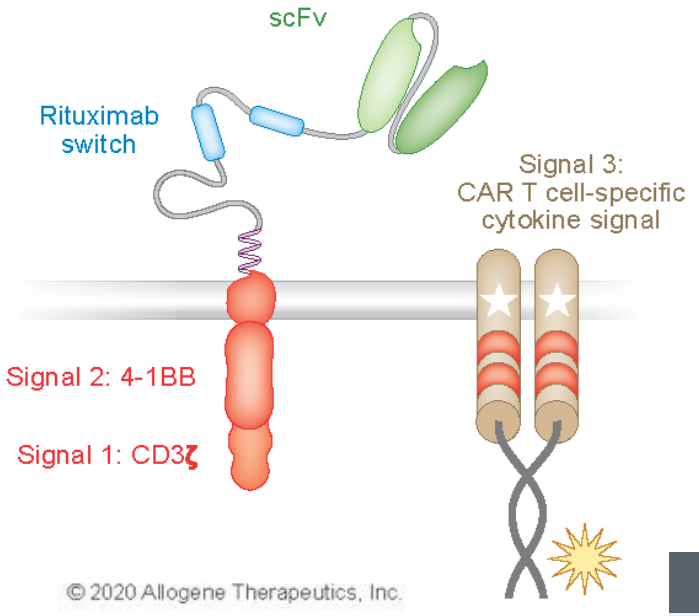
- Relapsed/Refractory Multiple Myeloma
- ≥ 3 prior therapies including IMiD, PI & anti-CD38
- Refractory to last prior therapy
- ECOG 0 or 1
- No donor-specific antibodies
- No bridging therapy allowed




ALLO-715 Dose Escalation: 320 or 480 x $10^6$ $CAR^+$ T cells

*IMiD: immunomodulatory imade drug*
*PI: proteosome inhibitors*

# ALLO-605: First TurboCAR™ Investigational Candidate

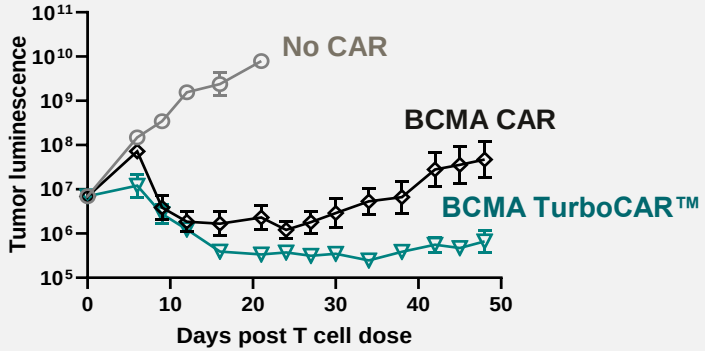




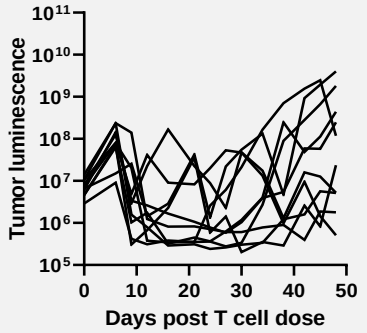
**ALLO-605 IND Planned in 1H 2021 for the IGNITE Trial**

- **TurboCAR™ is designed to recapitulate cytokine signaling selectively in CAR T cells**
  - Does not stimulate host immune cells which could cause systemic toxicity or reject CAR
  - Delivers survival benefit selectively to CAR T cells
- **Opportunities for development include:**
  - Improving the efficacy of CAR T cells
  - Reducing CAR T cell dose requirement
  - Overcoming exhaustion to enable CAR T therapies for solid tumors
- **Improved Engraftment and Persistence, and Delayed Exhaustion seen in preclinical studies**

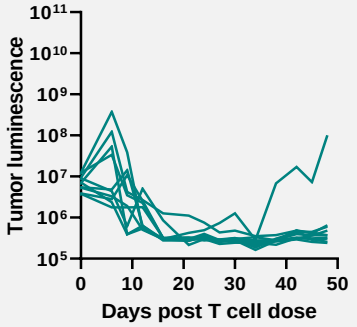
**Enhanced Activity and Durability of Response**




**BCMA CAR**




**BCMA TurboCAR™**



# Translating CAR T Success in Hematologic Cancers to Solid Tumors

**2020 American Cancer Society Statistics**

| | Heme Malignancies | Solid Tumors |
|---|---|---|
| Incidence | 179,000 | 1,600,000 |
| Deaths | 57,000 | 504,000 |

**Worldwide Market for Oncology Drugs in 2018***

- All drug spend = $1.2 trillion
- Total cancer drug spend ≈ $150 billion
- Hematologic cancer drugs ≈ $31.3 billion

*IQVIA

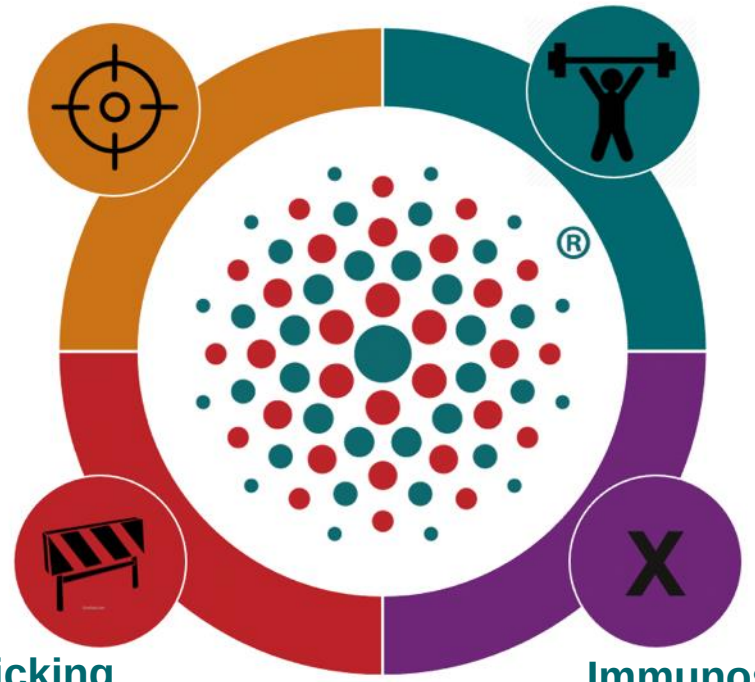
**Significant opportunity to expand benefits of CAR T therapy into largest area of unmet need**

## Target Selection/Validation

- CAR optimization
- Multi-targeting CARs

## T Cell Fitness

- CAR signaling/ TurboCARs™
- Manufacturing improvements



## Tumor Trafficking

- Combinations
- CAR T engineering

## Immunosuppressive TME

- Next generation TurboCARs™
- Enhanced/flexible lymphodepletion
- CAR T cell doses, frequencies and administration of cells



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# ALLO-316: Investigating an AlloCAR T™ in Renal Cell Carcinoma

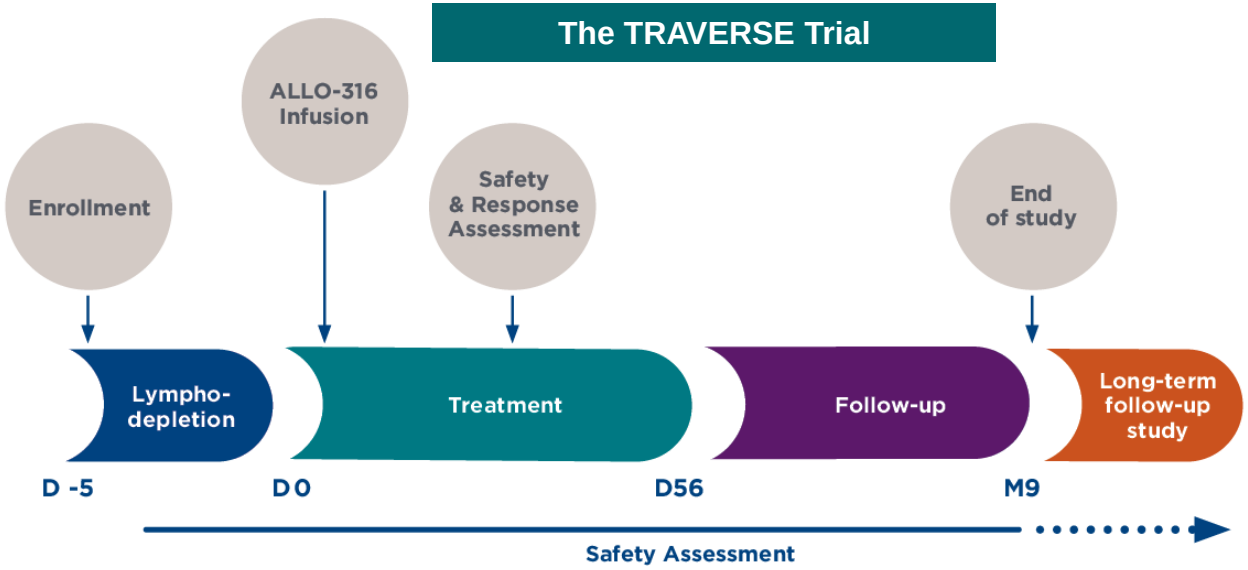
*First of Several Solid Tumor Candidates Planned for Clinical Development*

**CD70 target selectively expressed in several cancers[1]:**

- RCC (80-100% of tumors)
  - High prevalence with limited ‘off tumor’ expression
- AML (96% of tumors)

**IND cleared for anti-CD70 candidate ALLO-316:**

- ALLO-316 is associated with minimal or no fratricide
- Phase I TRAVERSE trial in RCC to begin in 1H 2021
  - Primary endpoints: Safety and tolerability
  - Secondary endpoints: Anti-tumor efficacy, PK/PD
- Potential second indication in AML targeted for 2021/2022




| | DL1 | DL2 | DL3 | DL4 |
|---|---|---|---|---|
| Cell Dose | 40 x $10^6$ CAR$^+$ T cells | 120 x $10^6$ CAR$^+$ T cells | 360 x $10^6$ CAR$^+$ T cells | 480 x $10^6$ CAR$^+$ T cells |

[1] Expert Opin Ther Targets. 2008 Mar; 12(3): 341–351. doi: 10.1517/14728222.12.3.341



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# Partnerships: Accelerating Development and Positioning for the Future

**GLOBAL EXPANSION**

SERVIER

Global development partner for CD19 with ex-US commercialization rights

OVERLAND PHARMA

Established Allogene Overland Biopharm joint venture to develop and commercialize AlloCAR T™ cell therapies in greater China

**TECHNOLOGIES**

cellectis

TALEN gene editing

Notch THERAPEUTICS

Induced pluripotent stem cells (iPSC)

MaxCyte®

Enhanced manufacturing efficiency

**RESEARCH**

MD Anderson Cancer Center

Preclinical and clinical investigation of AlloCAR T candidates across Allogene's broad portfolio of hematologic and solid tumors

SpringWorks THERAPEUTICS

Clinical collaboration to evaluate ALLO-715 in combination with Nirogacestat

# Allogene Overland Joint Venture: Expanding into Greater China

*Opportunity to Accelerate Global Development of AlloCAR T Therapies*

**Allogene Therapeutics**

- Leadership in Allogeneic CAR T
- AlloCAR T assets
  - BCMA
  - CD70
  - FLT3
  - DLL3
- Manufacturing expertise

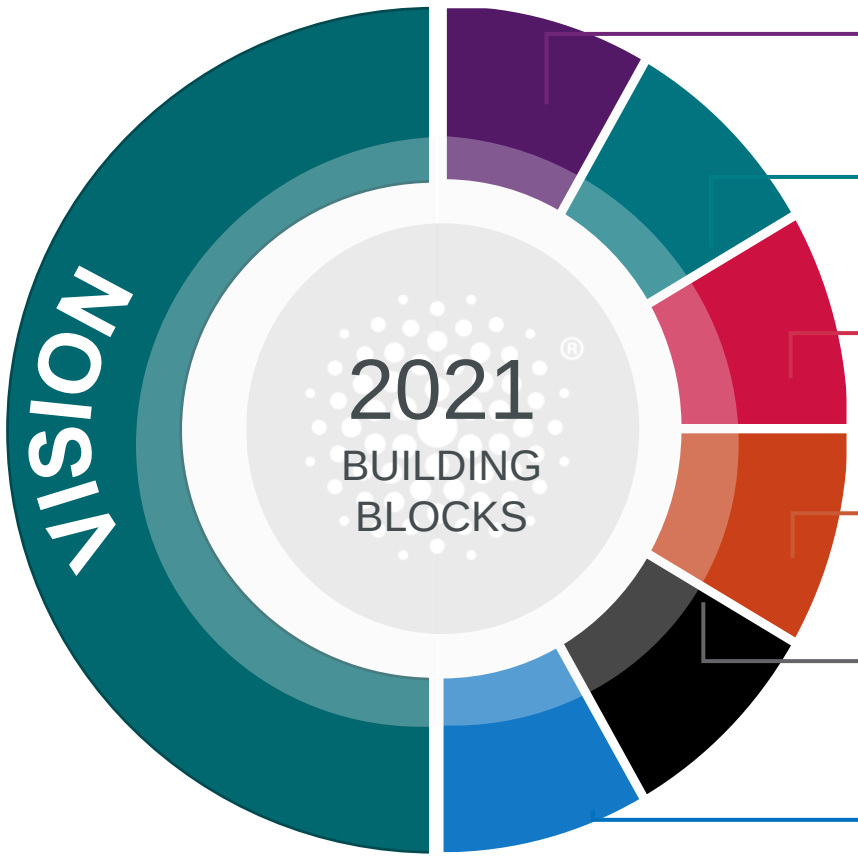
**Allogene Overland Biopharm**

- First-of-its-kind collaboration in allogeneic cell therapy
- Rights to develop AlloCAR T therapies for four targets in Greater China, Taiwan, South Korea and Singapore
- Milestones to Allogene and tiered royalties on net sales

**Overland Pharma**

- Backed by Hillhouse Capital
- $117 million in non-dilutive capital:
  - $40 million upfront to ALLO
  - $77 million to support joint venture operations

# 2021 Building Blocks to the Allogene Vision




- ☑ 1H: Initiate ALLO-715 (BCMA) + nirogacestat clinical trial
- 1H: Initiate ALLO-316 (CD70) clinical trial in RCC
- 1H: Submit ALLO-605 (BCMA) TurboCAR™ IND in MM
- 1H: ALLO-501/ALLO-501A (CD19) clinical update
- 2H: Initiate ALLO-501A (CD19) pivotal trial
- 2H: ALLO-715 (BCMA) clinical update

*Create and lead the next revolution in cancer treatment*
*by delivering to patients the first AlloCAR T™ therapies for blood cancers and solid tumors.*

Allogene® THERAPEUTICS

# The Next Revolution in Cell Therapy

## Leading Today, Creating Tomorrow

*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. while Servier retains exclusive rights for all other countries. Allogene has an exclusive license to the Cellectis technology for allogeneic products directed at BCMA, FLT3, DLL3 and CD70.*

# ALLO-501 ALPHA Study (NCT03939026) Design and Endpoints

## Phase 1, Open-label, Multicenter Dose Escalation Study

**Primary Endpoints**

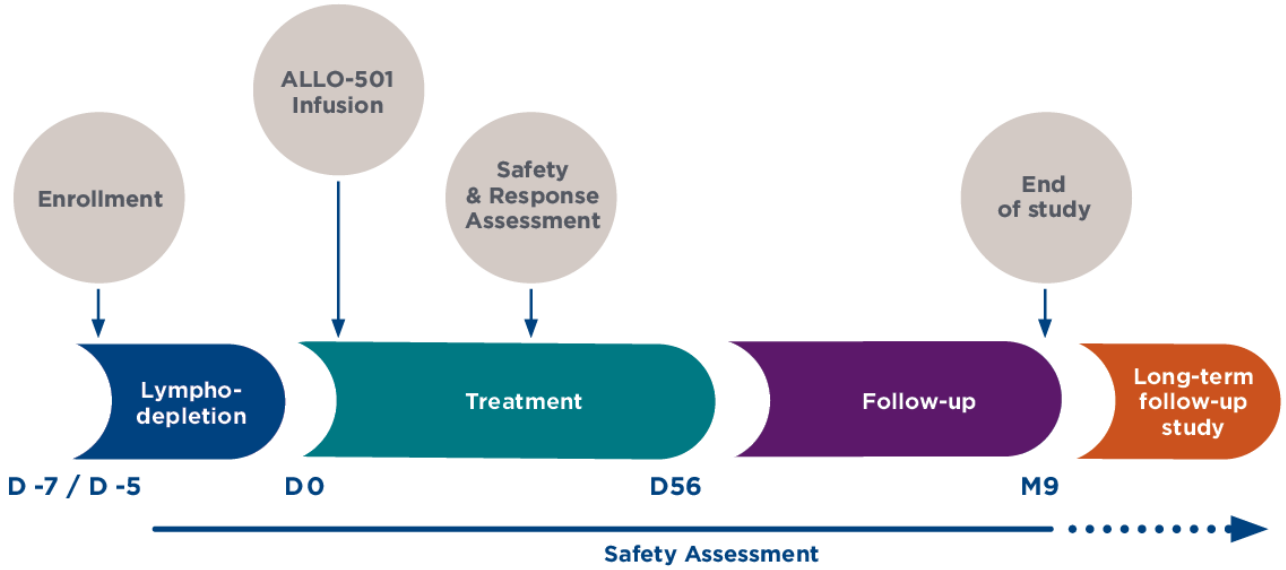
- Safety and dose-limiting toxicity of ALLO-647/Flu/Cy followed by ALLO-501

**Key Secondary Endpoints**

- Overall response rate
- ALLO-501 cell kinetics
- ALLO-647 PK

**Key Eligibility Criteria**

- R/R LBCL or FL
- At least 2 prior lines of therapy, including an anti-CD20 monoclonal antibody
- ECOG 0 or 1
- Prior autologous CAR T allowed if tumor remains CD19+
- Patients with Donor Specific Antibodies and rituximab > 15ng/ml were excluded




| | DL1 | DL2 | DL3 |
|---|---|---|---|
| Cell Dose | 40 x $10^6$ $CAR^+$ T cells | 120 x $10^6$ $CAR^+$ T cells | 360 x $10^6$ $CAR^+$ T cells |

- Lymphodepletion Regimens
  - LD1: Flu/Cy and ALLO-647 13 mg/d x 3 days
  - LD2/LD3: Flu/Cy and ALLO-647 30 mg/d x 3 days (concomitant/staggered)

**Fludarabine (Flu)**: 30 mg/m2/d x 3 days **Cyclophosphamide (Cy)**: 300 mg/m2/d x 3 days



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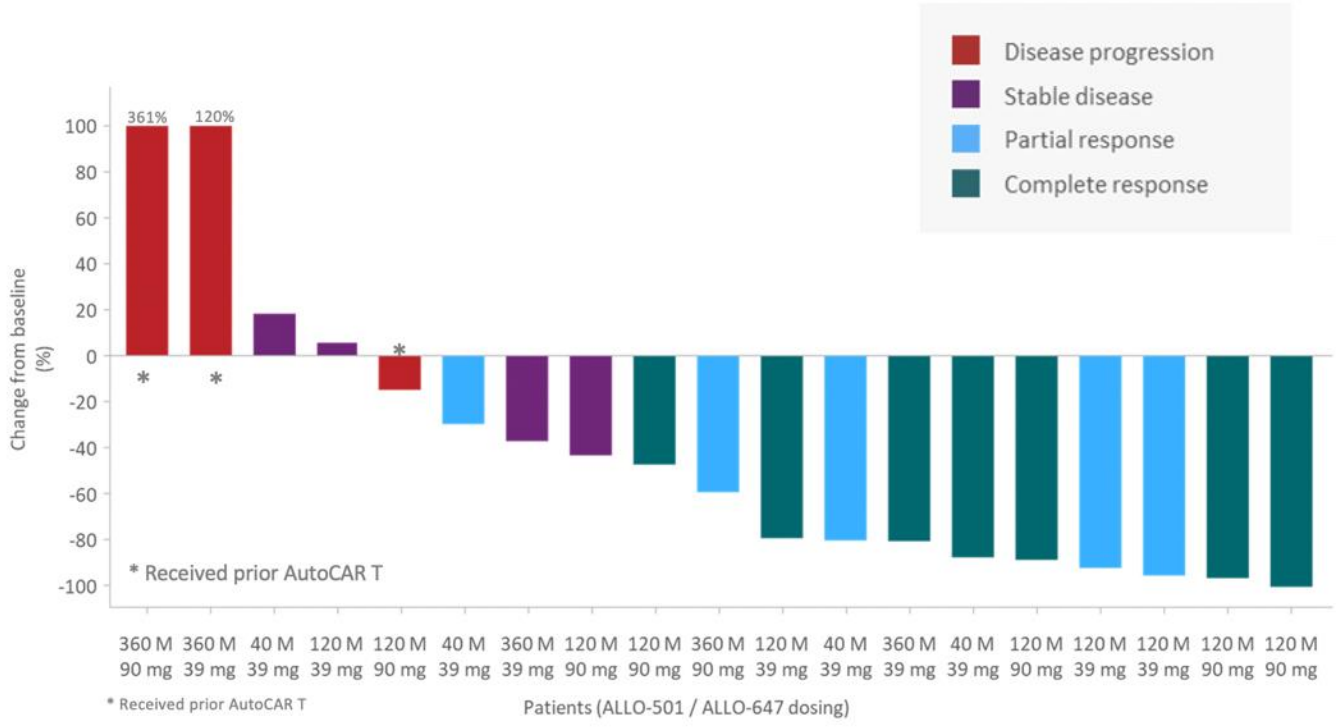
# Phase 1 ALPHA Best Overall Response

| Cell Dose and LD regimen | 39mg ALLO-647 | | | ALL 39mg ALLO-647 (N = 11) | 90mg ALLO-647 | | All 90mg ALLO-647 (N=8) | All Patients (N=19) Rate (95%CI) |
|---|---|---|---|---|---|---|---|---|
| | 40 x $10^6$ CAR$^+$ cells (N=4) | 120 x $10^6$ CAR$^+$ cells (N=4) | 360 x $10^6$ CAR$^+$ cells (N=3) | | 120 x $10^6$ CAR$^+$ cells (N=6) | 360 x $10^6$ CAR$^+$ cells (N=2) | | |
| ORR, n (%) | 3 (75%) | 3 (75%) | 1 (33%) | 7 (64%) | 4 (67%) | 1 (50%) | 5 (63%) | 12/19 (63%) (38%, 84%) |
| CR , n (%) | 1 (25%) | 1 (25%) | 1 (33%) | 3 (27%) | 4 (67%) | 0 (0%) | 4 (50%) | 7/19 (37%) (16%, 62%) |

*Median follow-up time: 3.8 months (range: 0.7 - 6.1)*

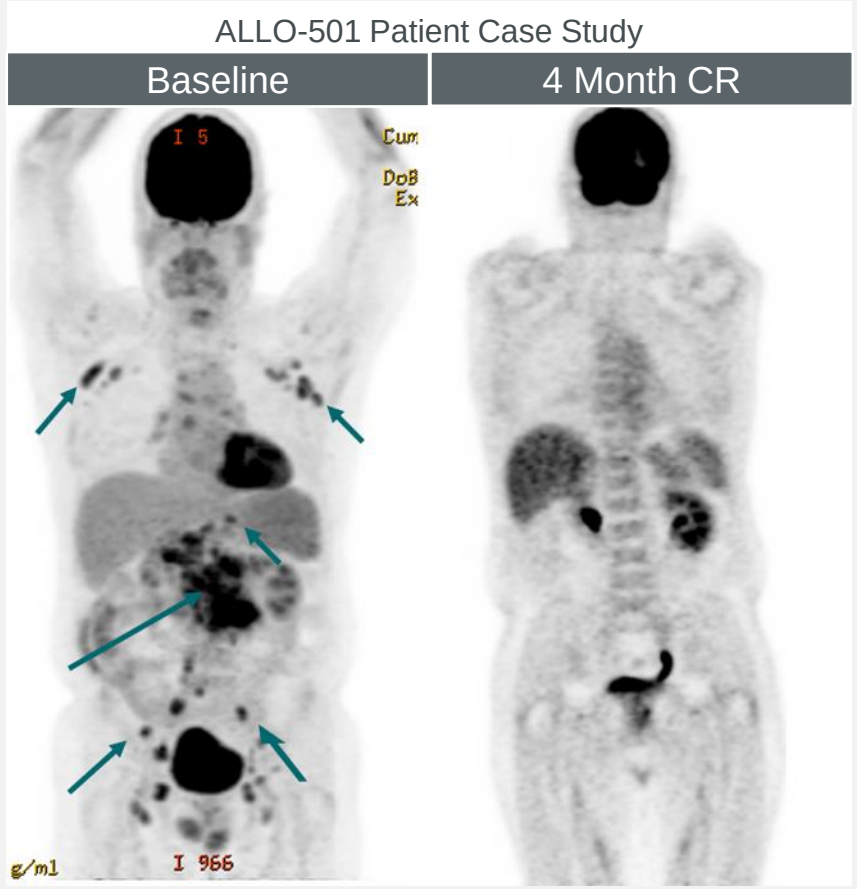
Lugano 2014; ASCO 2020

# ALLO-501 Demonstrated Meaningful Tumor Reductions




ASCO May 2020

## 4 Month Ongoing CR



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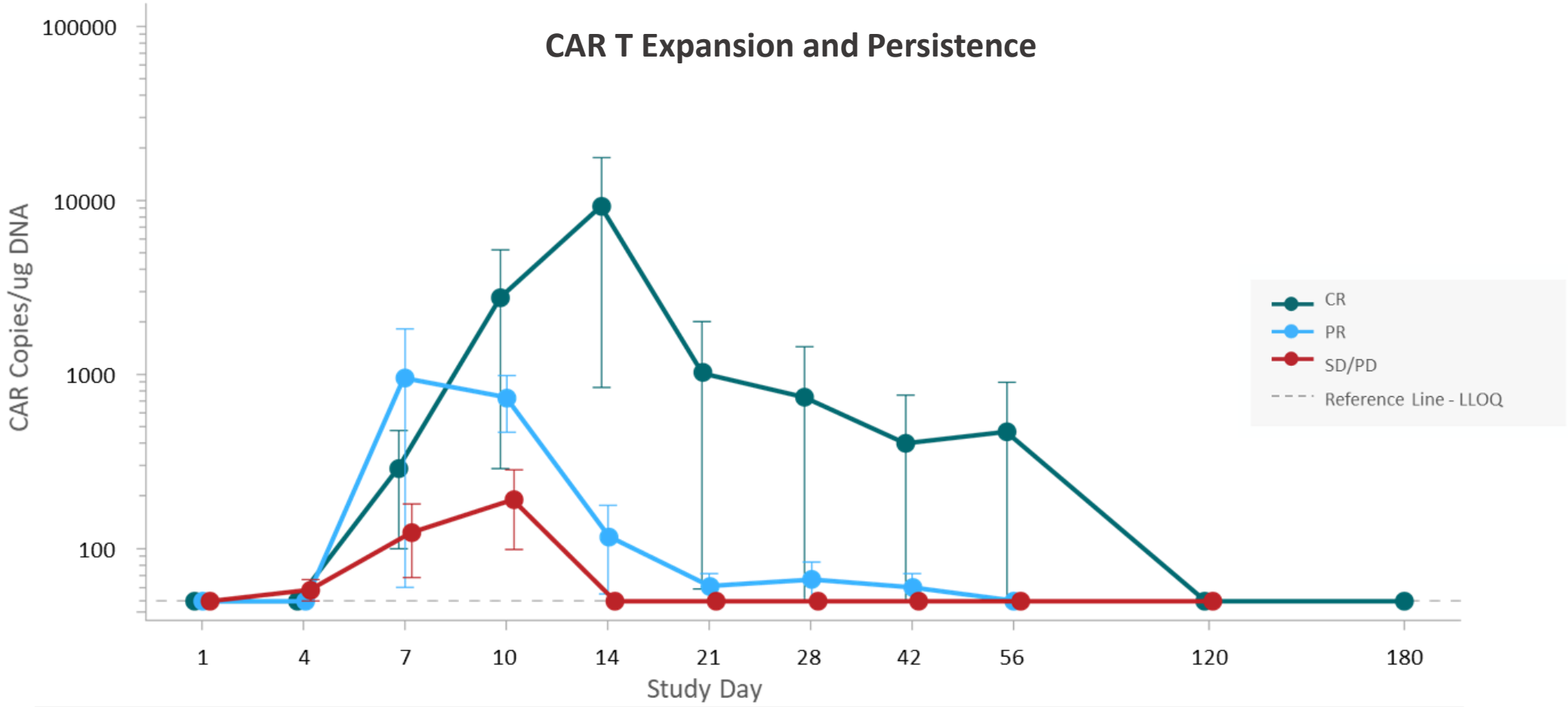
# AlloCAR T Cell Expansion Is Associated with Clinical Response




| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CR | 6 | 5 | 5 | 6 | 6 | 6 | 6 | 2 | 2 | 1 | 1 |
| PR | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | | |
| SD/PD | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 2 | 2 | 1 | |

# ALPHA Trial: De-Risking the CD19 Program

- ☑ Can ALLO-501 be successfully manufactured?
- ☑ Can ALLO-501 be safely administered without causing clinically relevant Graft vs. Host Disease?
- ☑ Can ALLO-647 be safely administered and allow a sufficient window of lymphodepletion to allow ALLO-501 expansion and persistence?
- ☑ Can ALLO-501 provide complete responses across multiple histologies?
- ONGOING Can ALLO-501 provide durable responses?

# Heavily Pretreated Patients with Advanced, Refractory Stage Disease

*Median Time from Enrollment to Treatment:*
***5 Days***

**Enrolled (N=35)**

*4 patients ineligible due to rapidly progressing disease*

**Safety Population (N=31)**

*5 treated patients yet to reach assessment*

**Efficacy Population (N=26)**

| CAR+ T Cell Dose | Lymphodepletion Regimen | | |
|---|---|---|---|
| | FCA | | CA |
| | Low Dose ALLO-647 | High Dose ALLO-647 | Low Dose ALLO-647 |
| 40 x $10^6$ Cells | 3 | – | – |
| 160 x $10^6$ Cells | 4 | – | 3 |
| 320 x $10^6$ Cells | 6 | 4 | 3 |
| 480 x $10^6$ Cells | 3 | – | – |

*Overall median follow-up time = **3.2 Months***

*All Patients Refractory to Last Line of Therapy*

| Characteristics | | Safety Population (N = 31) |
|---|---|---|
| Age, median (range), years | | 65 (46, 76) |
| Gender, % | Male | 61 |
| | Female | 39 |
| ECOG, % | 0 | 48 |
| | 1 | 52 |
| ISS Stage ≥2, % | | 74 |
| **High-risk cytogenetics*, %** | | **48** |
| **Extramedullary disease, %** | | **23** |
| High tumor burden†, % | | 39 |
| Time since initial diagnosis, median (range), years | | 5.4 (0.9, 20.1) |
| Number of prior anti-myeloma regimens, median (range) | | 5 (3 – 11) |
| Prior autologous SCT, % | | 94 |
| **Penta-exposed, %** | | **94** |

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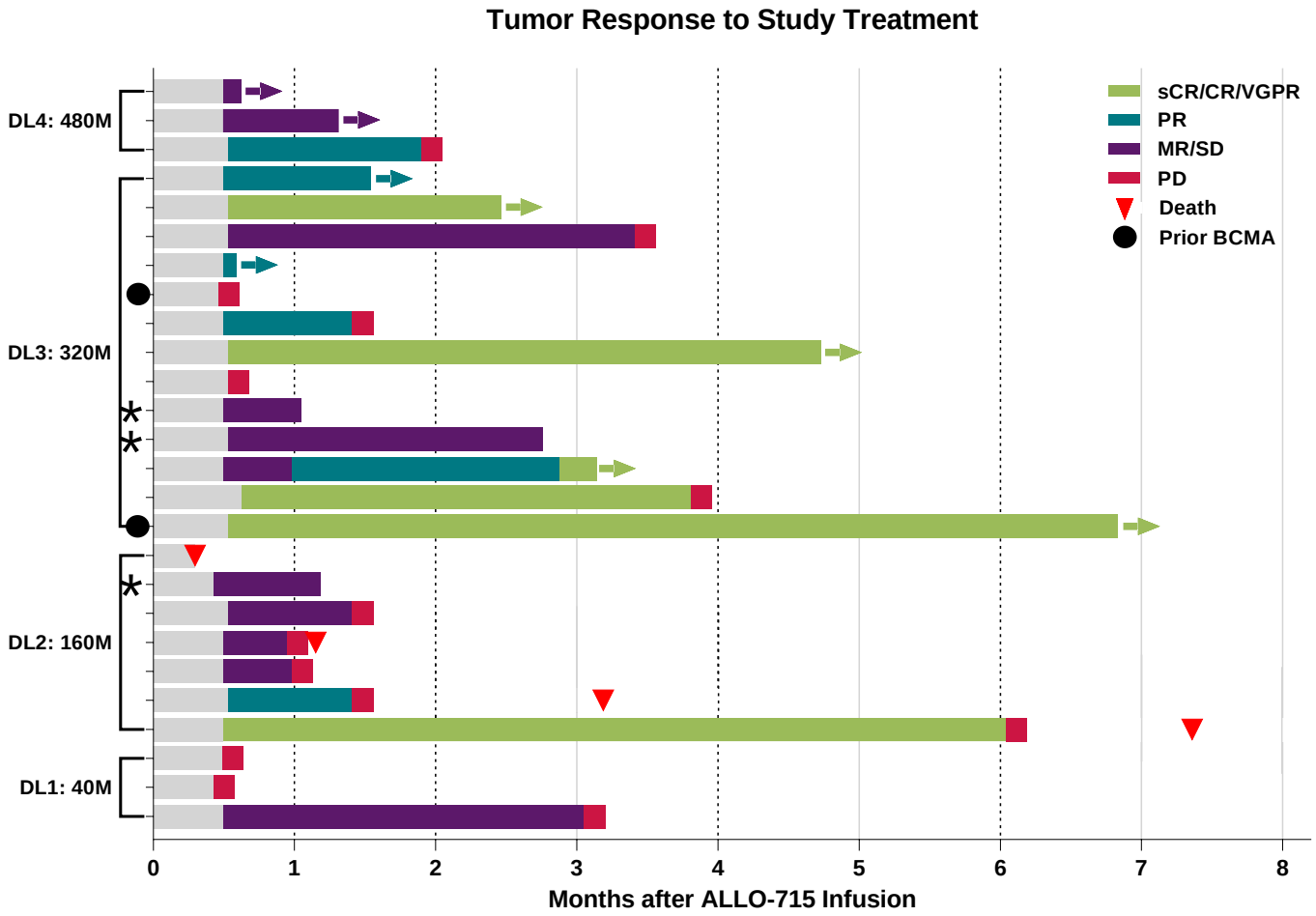
# Objective Responses are Cell Dose-Dependent




- Median time to response was 16 days
- Increasing response rates as cell dose increases
- 6 out of 9 patients treated with DL3 or DL4 with response remain in response

*Discontinued follow-up on study prior to disease progression.

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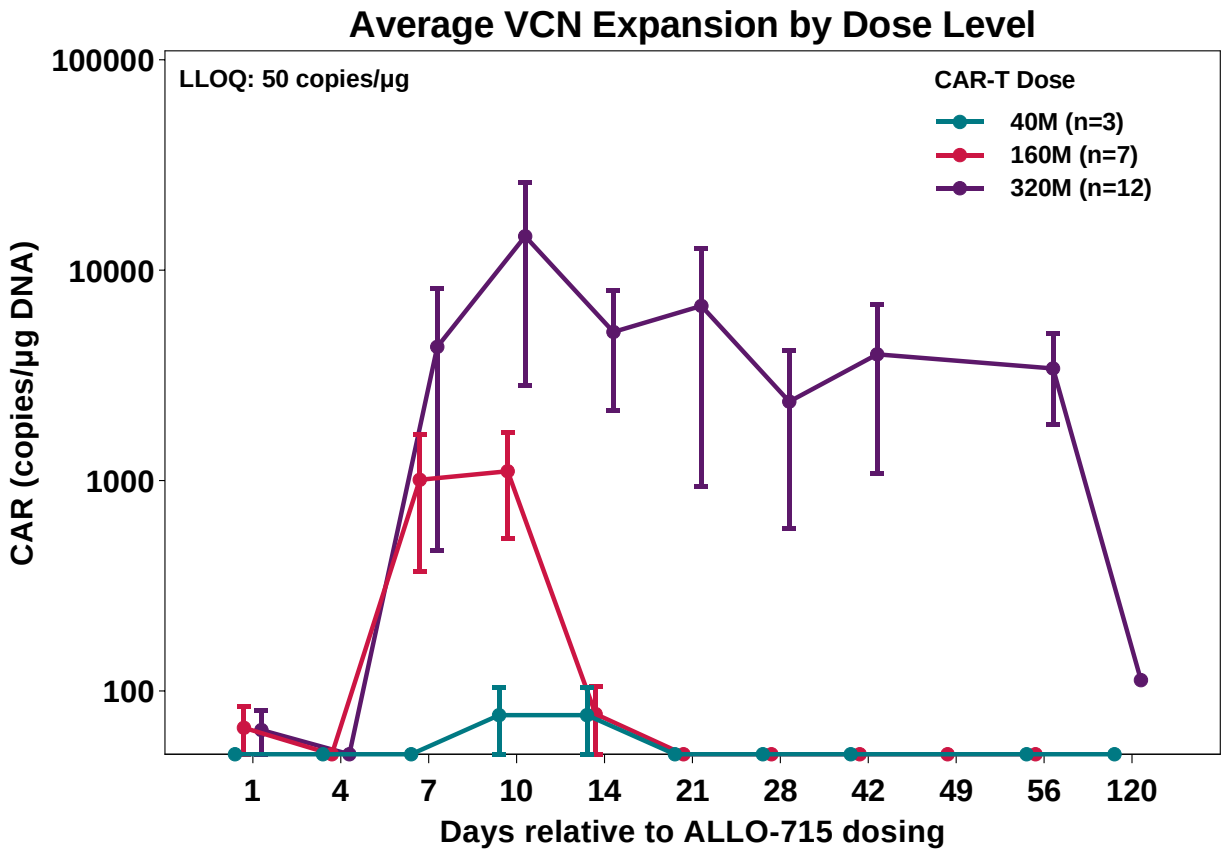
# AlloCAR T Cell Expansion Increased with ALLO-715 Dose Level




- Cell expansion was observed as early as 7 days
- Improved expansion in patients who received higher cell doses
- Persistence observed out to month 4 in dose level 3
- Patients with CAR T expansion had higher serum levels of IL15 at day 0 and day 14 *[data not shown]*

As of data cutoff date, limited DL4 vector copy number (VCN) data was available (2 patients with neither patient reaching day 28). Remaining data pending.

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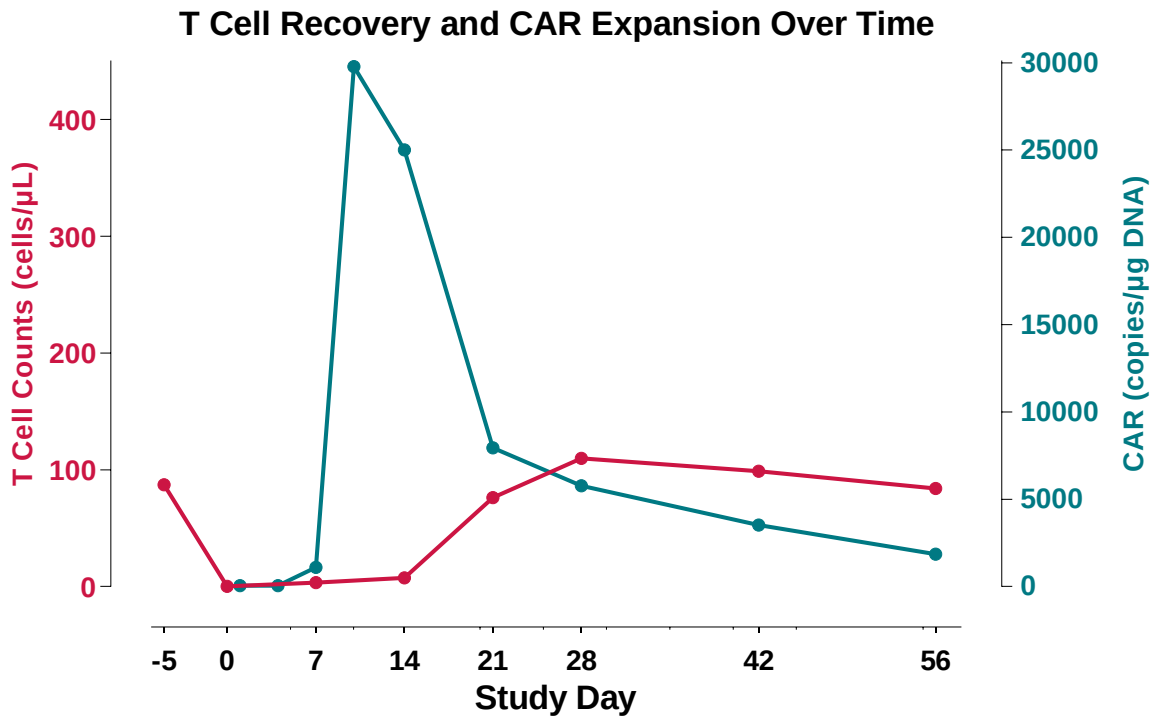
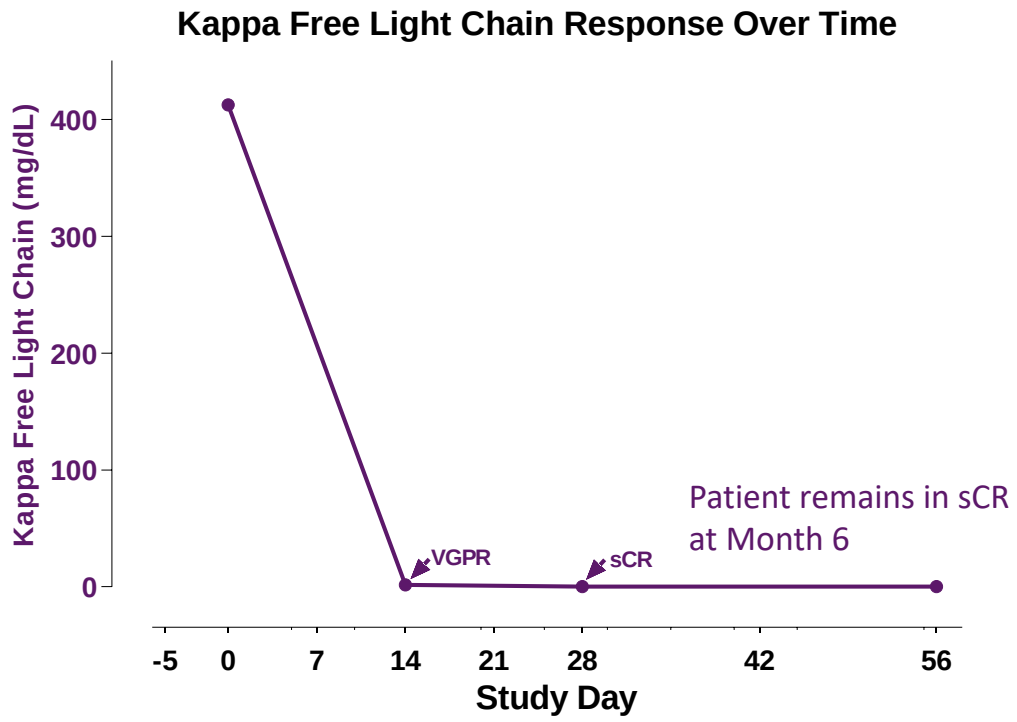
# ALLO-715 Case Study:
## Kinetics of AlloCAR T Cell Persistence, Lymphocyte Count and Response

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# UNIVERSAL: De-Risking the Anti-BCMA AlloCAR T Franchise in MM

- ☑ Can ALLO-715 be successfully manufactured?
- ☑ Can ALLO-715 be safely administered without causing clinically relevant Graft vs. Host Disease?
- ☑ Can ALLO-647 be safely administered and allow a sufficient window of lymphodepletion to allow ALLO-715 expansion and persistence?
- ☑ Can an allogeneic CAR T therapy demonstrate a meaningful response in a heavily treated/refractory patient with multiple myeloma?
- ONGOING Can we further enhance the efficacy and durability of allogeneic cell therapy in multiple myeloma?