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SMARTER MEDICINE™

# **Role of IL-15 within the Cell Therapy Landscape**

***Investor and Analyst Event***

***December 2022***

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# Today's Speakers



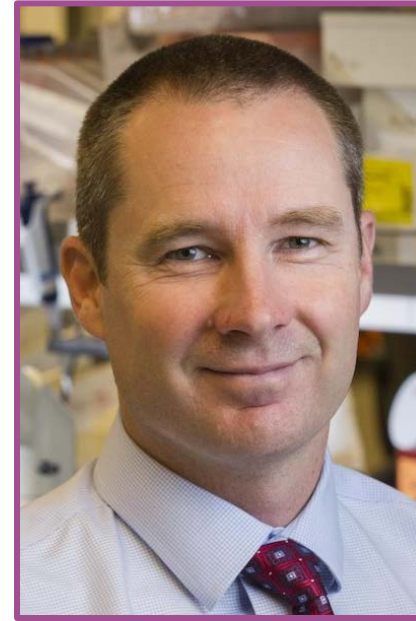
**Mary Tagliaferri, MD**

Chief Development Officer  
at Nektar Therapeutics



**Mario Marcondes, MD, PhD**

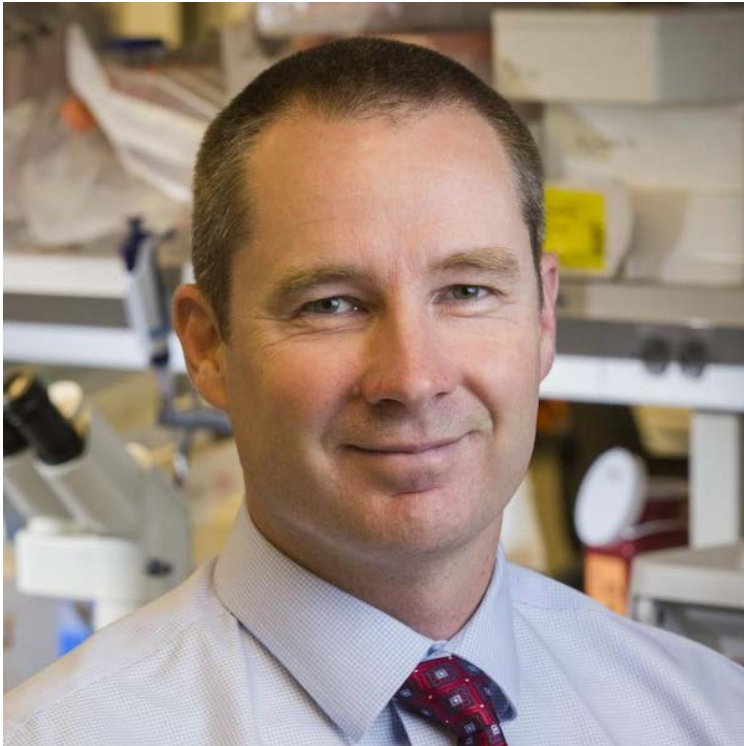
VP, Head of Clinical Development  
at Nektar Therapeutics



**Cameron Turtle, MBBS, PhD**

Chair of Cancer Immunotherapy  
at University of Sydney and  
Fred Hutchinson Cancer Center  
affiliate

# Cameron Turtle, MBBS, PhD – University of Sydney



Cameron Turtle, MBBS, PhD, spent 16 years at Fred Hutchinson Cancer Research Center, the University of Washington, and Seattle Cancer Care Alliance (SCCA). He served as Professor of Medicine and as an attending physician, specializing in treating blood diseases with cellular immunotherapies and hematopoietic stem cell transplantation. He is now the Chair of Cancer Immunotherapy at Sydney Medical School at the University of Sydney, Australia. He is a leader in the field of immunoncology and novel T cell therapies and has led many clinical trials evaluating chimeric antigen receptor T (CAR-T) cell therapies in non-Hodgkin's lymphoma, acute lymphoblastic leukemia, and chronic lymphocytic leukemia. Dr. Turtle designed the investigator-sponsored, Phase 1 trial at Fred Hutchinson Cancer Research Center of NKTR-255 in combination with Breyanzi, an approved CAR-T cell therapy, in patients with relapsed or refractory large B cell lymphoma.

# Agenda

## Role of IL-15 within the Cell Therapy Landscape

- *ASH 2022: “Safety, Tolerability, PK/PD, and Preliminary Efficacy of NKTR-255, a Novel IL-15 Receptor Agonist, in Patients with Relapsed/Refractory Hematologic Malignancies”*
  - *Mary Tagliaferri, MD, Nektar Therapeutics*
- *Overview of Cell Therapy Landscape and Rationale for NKTR-255 Combination with CAR-T*
  - *Cameron Turtle, MBBS, PhD, University of Sydney and Fred Hutchinson Cancer Center (Turtle Lab)*
- *Ongoing and Planned Studies*
  - *Mary Tagliaferri, MD, Nektar Therapeutics*
- *Q&A Session*



# 3 Pillars of Development Strategy for NKTR-255

## Potentiate Cellular Therapies

- Phase 2/3 study combining NKTR-255 with commercially approved CD-19 targeted CAR T cell therapies in 2L+ relapsed/refractory DLBCL
- Phase 1/2 IST with Stanford (Dr. Crystal Mackall) combining NKTR-255 with CD19/CD22 CAR T cell therapies in B-cell ALL
- Phase 1/2 IST with Fred Hutchinson (Dr. Cameron Turtle) combining NKTR-255 with Breyanzi in LBCL

## Augment ADCC

- Phase 1/2 study combining NKTR-255 with NKTR-255 + Daratumumab in Multiple Myeloma
- Phase 1/2 study combining NKTR-255 with Cetuximab in HNSCC

## Synergize with Checkpoint Inhibitors

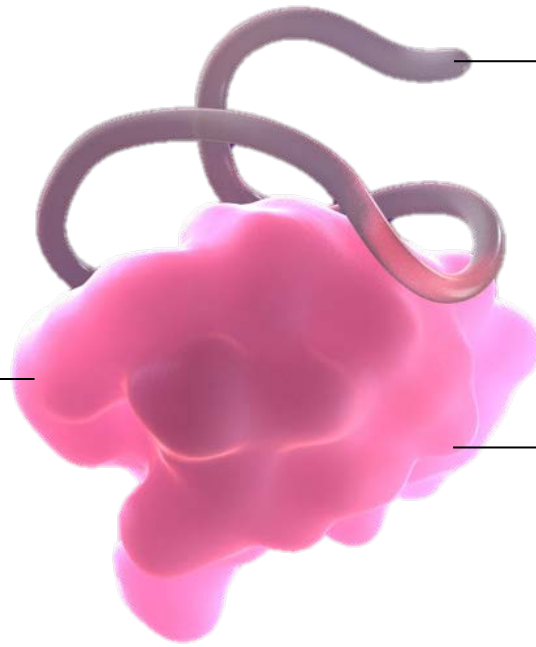
- Phase 2 study with Merck KGaA combining NKTR-255 plus avelumab in patients with mUC in the maintenance setting (Bladder Javelin Medley Trial)
- Phase 1/2 IST with MDACC (Dr. Steven Lin) combining NKTR-255 plus durvalumab in patients with Stage 3 NSCLC and lymphopenia

# NKTR-255: IL-15 Agonist Designed to Capture Full Receptor Binding

CONFIDENTIAL

*Nektar leveraged polymer conjugation technology used in approved PEGylation products to create NKTR-255*

Native IL-15 amino acid sequence with no mutagenesis retains IL-15R $\alpha$  binding specificity and maintains IL-15 biological context

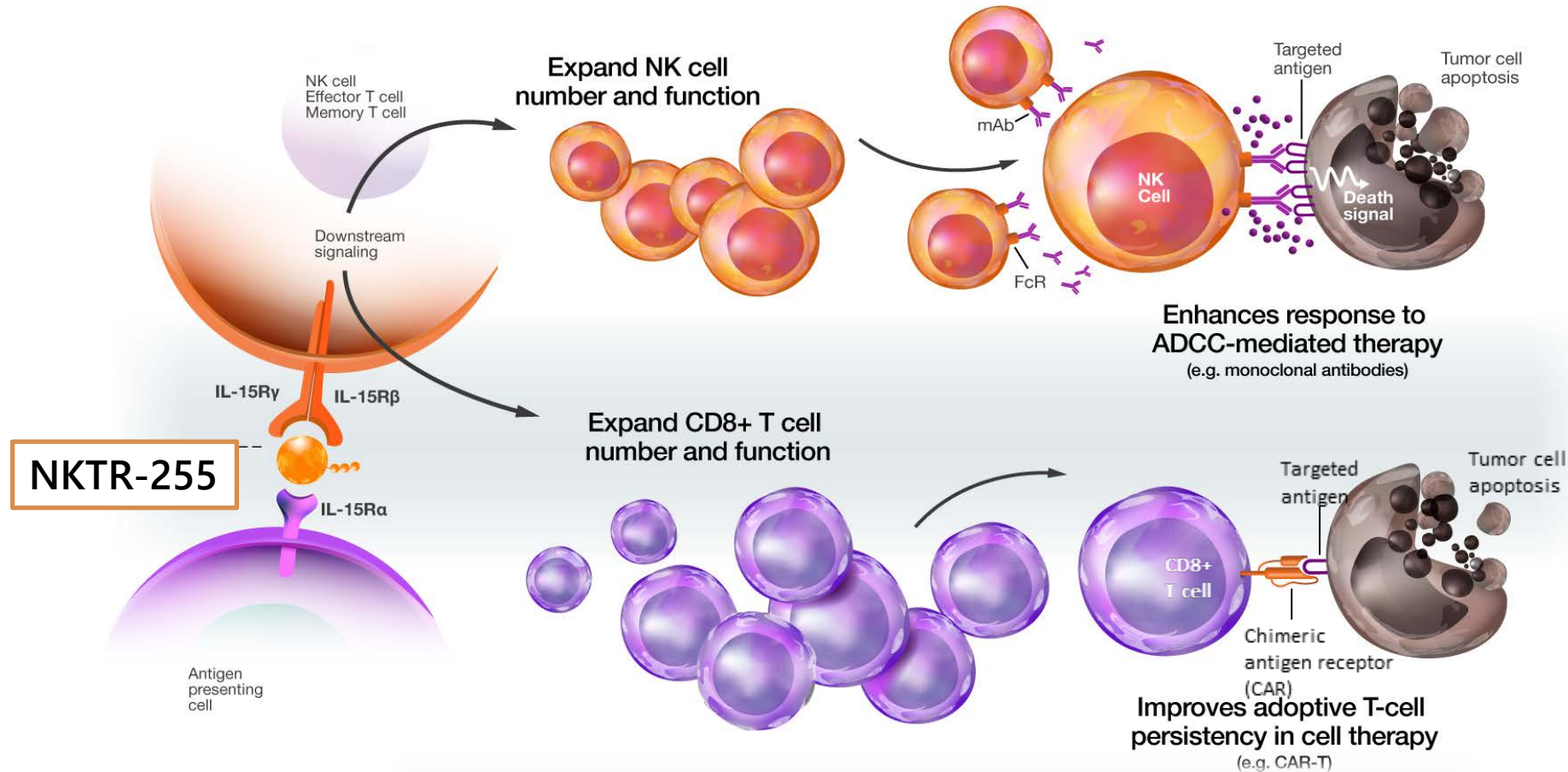


PEG moiety improves PK and PD of native IL-15 (Q3W/Q4W dosing) to increase CD8+ T cell and NK cell number and function in patients

Streamlined and scalable manufacturing process

# NKTR-255 is Designed to Boost NK Cells and Expand CD8+ Effector and Memory T-cells

## Boost NK cell numbers and function



## Enhancement of ADCC Antibodies

Daratumumab  
Rituximab  
Cetuximab

Potential to combine with any targeted antibody that utilizes an ADCC MOA

## Enhancement of CAR-T Regimens

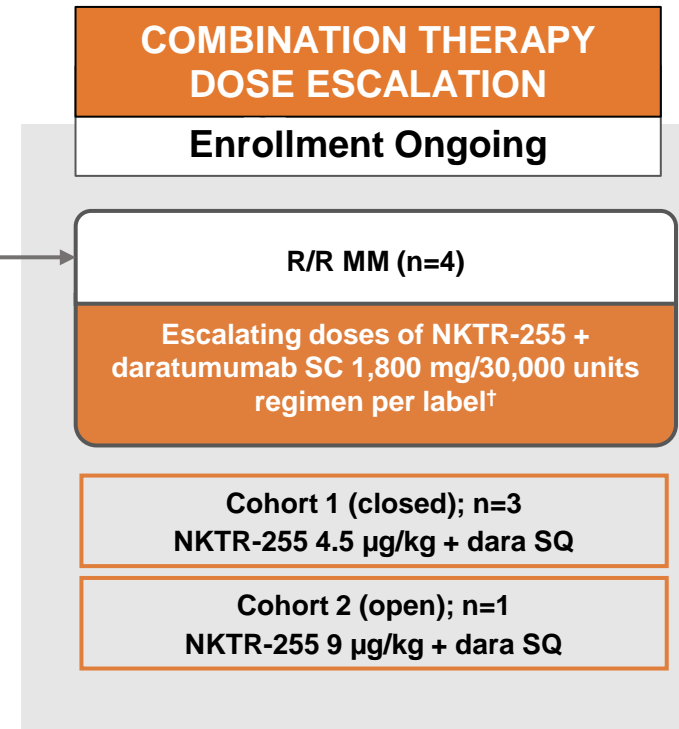
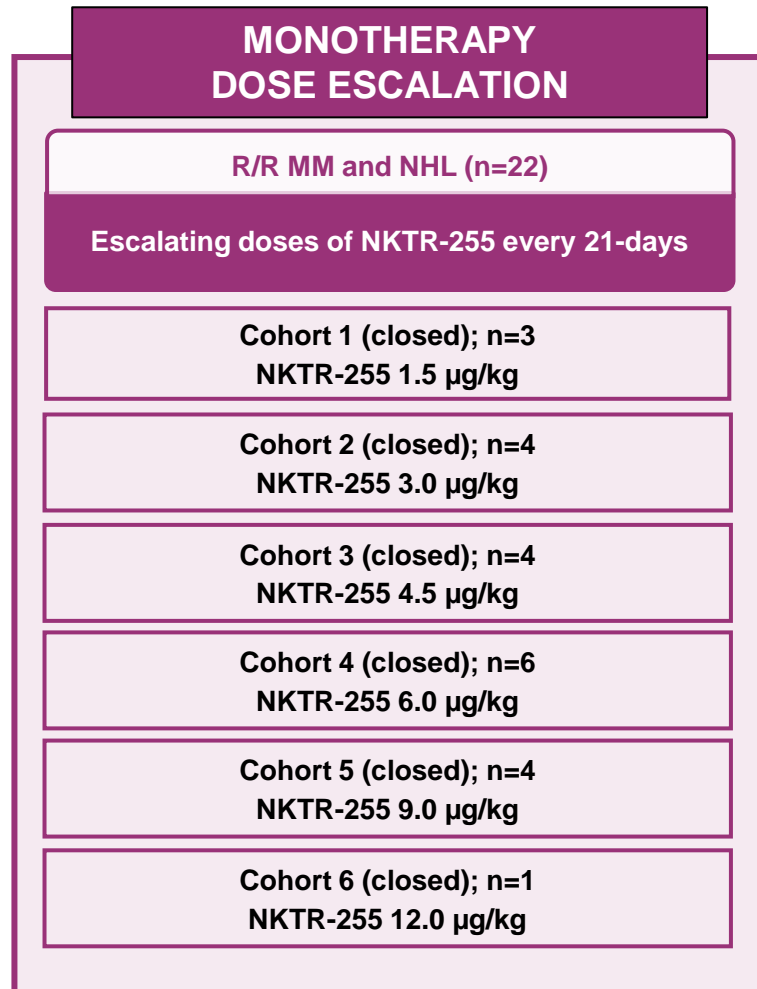
CD19 CAR-T  
BCMA CAR-T  
CD38 CAR-T

Potential to expand into other hematological and solid tumor CAR-T and cellular therapies

Increase duration of response for CAR-T and cellular therapies



# ASH 2022: Study Design and Patients



## PRIMARY ENDPOINT

Safety and tolerability as monotherapy and in combination with daratumumab

## SECONDARY AND EXPLORATORY ENDPOINTS

- Pharmacodynamic effects
- Pharmacokinetics
- Efficacy

\*Dose-escalation rules: Successive cohorts each receive escalating doses of NKTR-255 every 21 days to determine the MTD/RP2D. A two-parameter Bayesian logistic regression model employing the escalation with overdose control principle was used to select dose level and determine the MTD. MTD will be declared when at least 6 patients are evaluated at a dose and the posterior probability of targeted toxicity is at least 50% for that dose.

†Darzalex Fastpro® SC 4-week cycle regimen: Weeks 1-8: once weekly, Weeks 9-24: q2weeks, then Week 25 onwards q4weeks; NKTR-255 in Cycles 1-3 is administered on Day 2 (e.g. one day after daratumumab) of the cycle and on Day 1 (e.g. same day) Cycle 4 beyond

# ASH 2022: Heavily Pre-treated Population Enrolled in NKTR-255 Dose-Escalation Phase (n=26)

## Patient Demographics and Disease Characteristics

Patients with NHL (n=8)		
Median age (range), years		65.5 (59–80)
Sex, n (%)	Female	4 (50)
	Male	4 (50)
Median (range) time since diagnosis, months		53.6 (12.9–226.0)
Median (range) number of prior therapies		4 (1–12)
Disease subtype, n (%)	Large B-cell lymphoma	1 (13)
	Diffuse large B-cell Lymphoma	4 (50)
	Follicular lymphoma	2 (25)
	Other/missing	1 (13)
Bulky disease, n (%)	Yes	1 (13)
	No	6 (75)
	Unknown	1 (13)
Prior therapies of interest, n (%)	Autologous stem cell transplants	2 (25)
	Allogeneic stem cell transplants	1 (13)
	CAR-T	4 (50)
CD20 containing regimens, n (%)	Rituximab	8 (100)
International Prognostic Index score, n (%)	0–1	1 (13)
	2–3	3 (38)
	4–5	3 (38)
	Unknown	1 (13)

Patients with MM (n=18)			
NKTR-255 monotherapy (n=14)		NKTR-255 + Dara (n=4)	
Median age (range), years		64.0 (49–78)	61.5 (52–70)
Sex, n (%)	Female	4 (29)	2 (50)
	Male	10 (71)	2 (50)
Median (range) time since diagnosis, months		86.0 (25.2–231.7)	122.4 (90.9–174.3)
Median (range) number of prior therapies		6 (3–16)	5.5 (5–10)
Cytogenetic risk, n (%)	Standard	7 (50)	2 (50)
	Intermediate	0	1 (25)
	High	5 (38)	1 (25)
	Not Available	2 (14)	0
Paraprotein type, n (%)	IgG	7 (50)	1 (25)
	IgA	3 (21)	1 (25)
	Light chain myeloma	2 (14)	2 (50)
	Unknown	2 (14)	0
Prior therapies of interest, n (%)	Autologous stem cell transplants	9 (64)	3 (75)
	Allogeneic stem cell transplants	1 (7)	1 (25)
	CAR-T	6 (43)	3 (75)
	IMiD	14 (100)	4 (100)
	Lenalidomide	13 (93)	4 (100)
	Proteasome inhibitor	14 (100)	4 (100)
CD38 experience, n (%)	Yes	14 (100)	4 (100)
ISS stage at screening, n (%)	I	7 (50)	2 (50)
	II	4 (28)	1 (25)
	III	1 (7)	0
	IV	0	0
	Not Available	2 (14)	1 (25)

# ASH 2022: Most TRAEs were Transient and Resolved Spontaneously or Using Standard Treatment Protocols

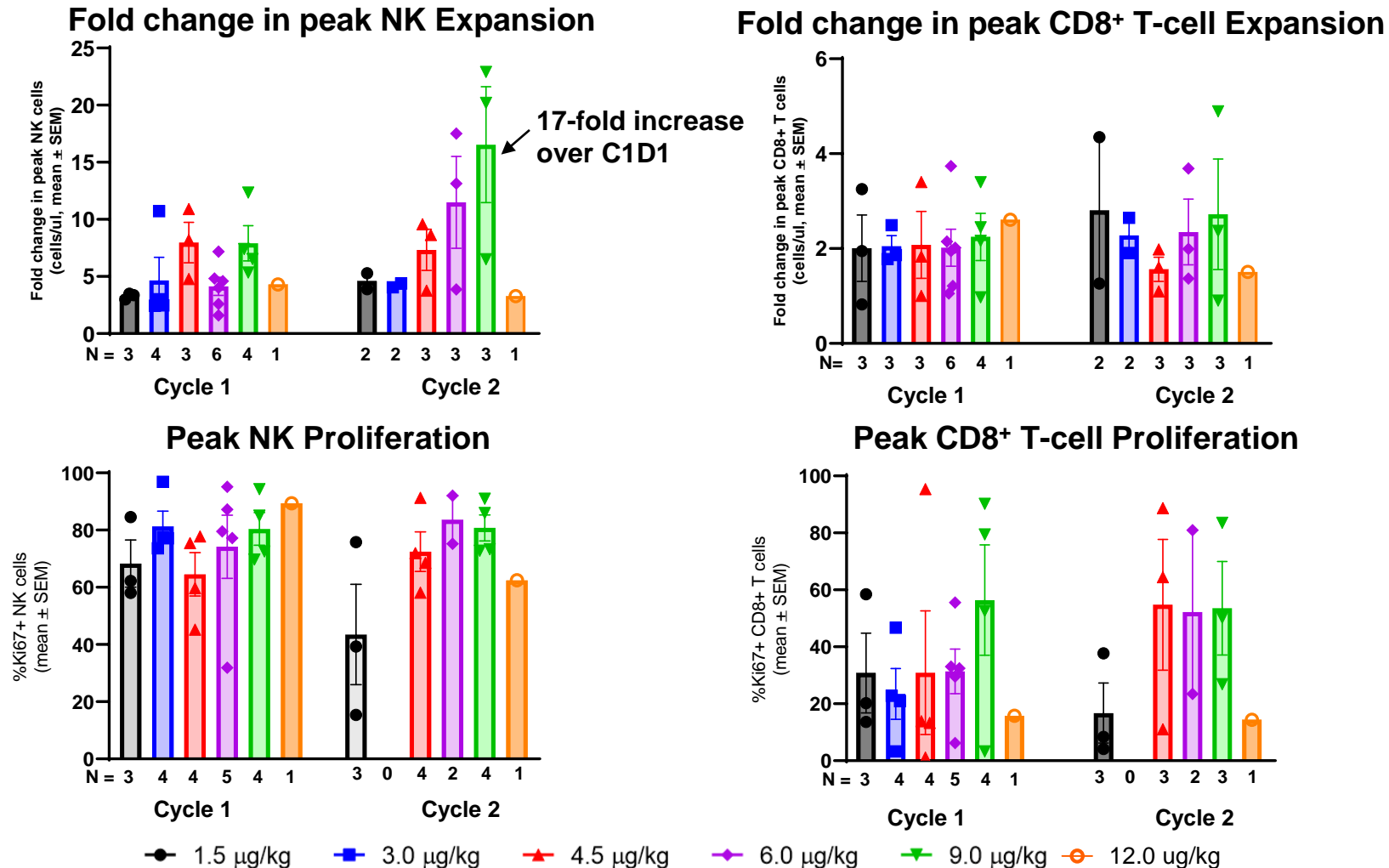
Select TRAEs; n (%)	1.5 µg/kg (n=3)	3 µg/kg (n=4)	4.5 µg/kg (n=4)	6 µg/kg (n=6)	9 µg/kg (n=4)	12 µg/kg (n=1)	4.5 µg/kg + dara (n=3)	9 µg/kg + dara (n=1)	Total (N=26)
<b>Grade 1 or 2 (≥25% of safety population)</b>									
Flu-like symptoms <sup>a</sup>	2 (67)	4 (100)	4 (100)	5 (100)	2 (50)	1 (100)	2 (67)	0	20 (77)
Infusion-related reaction	0	0	3 (75)	3 (50)	2 (50)	1 (100)	1 (33)	1 (100)	11 (42)
Fatigue	0	2 (50)	1 (25)	3 (50)	2 (50)	1 (100)	2 (66)	0	11 (42)
<b>Grade 3 (≥5% of safety population)</b>									
Neutropenia <sup>b</sup>	0	1 (25)	1 (25)	0	1 (25)	1 (100)	0	0	4 (18)
Anemia	0	0	0	1 (17)	1 (25)	0	0	0	2 (8)
Thrombocytopenia	0	0	0	1 (17)	1 (25)	0	0	0	2 (8)
Lymphopenia <sup>c</sup>	0	1 (25)	0	0	0	1 (100)	0	0	2 (8)
<b>Grade 4 (all)</b>									
Lymphopenia <sup>c</sup>	0	0	2 (50)	2 (33)	1 (25)	0	0	0	5 (19)

- 12 (46%) patients experienced serious TEAEs, of which 8 (31%) were NKTR-255 related. Serious TEAEs that occurred in 2 or more patients are IRR (Grade 1-2, n=5), CRS (Grade 1, n=2)
- Grade ≥3 lymphopenia occurred in 27% (7/26) of patients receiving NKTR-255. The median time to baseline recovery for these lymphopenia events was 3 days (range: 2 to 9 days)
- No ADAs detected in 54 samples collected from 17 subjects treated with NKTR-255 monotherapy for up to 8 cycles over the dose range of 1.5 to 9 µg/kg.

Clinical cutoff: October 20, 2022. During the first cycle, patients were not allowed to receive pre-medications (e.g. antipyretic/antihistamines). Patients counted only once within each preferred or grouped term, using highest reported toxicity grade.

# ASH 2022: NKTR-255 Monotherapy Led to Expansion and Increased Proliferative Capacity of NK and CD8+ T cells

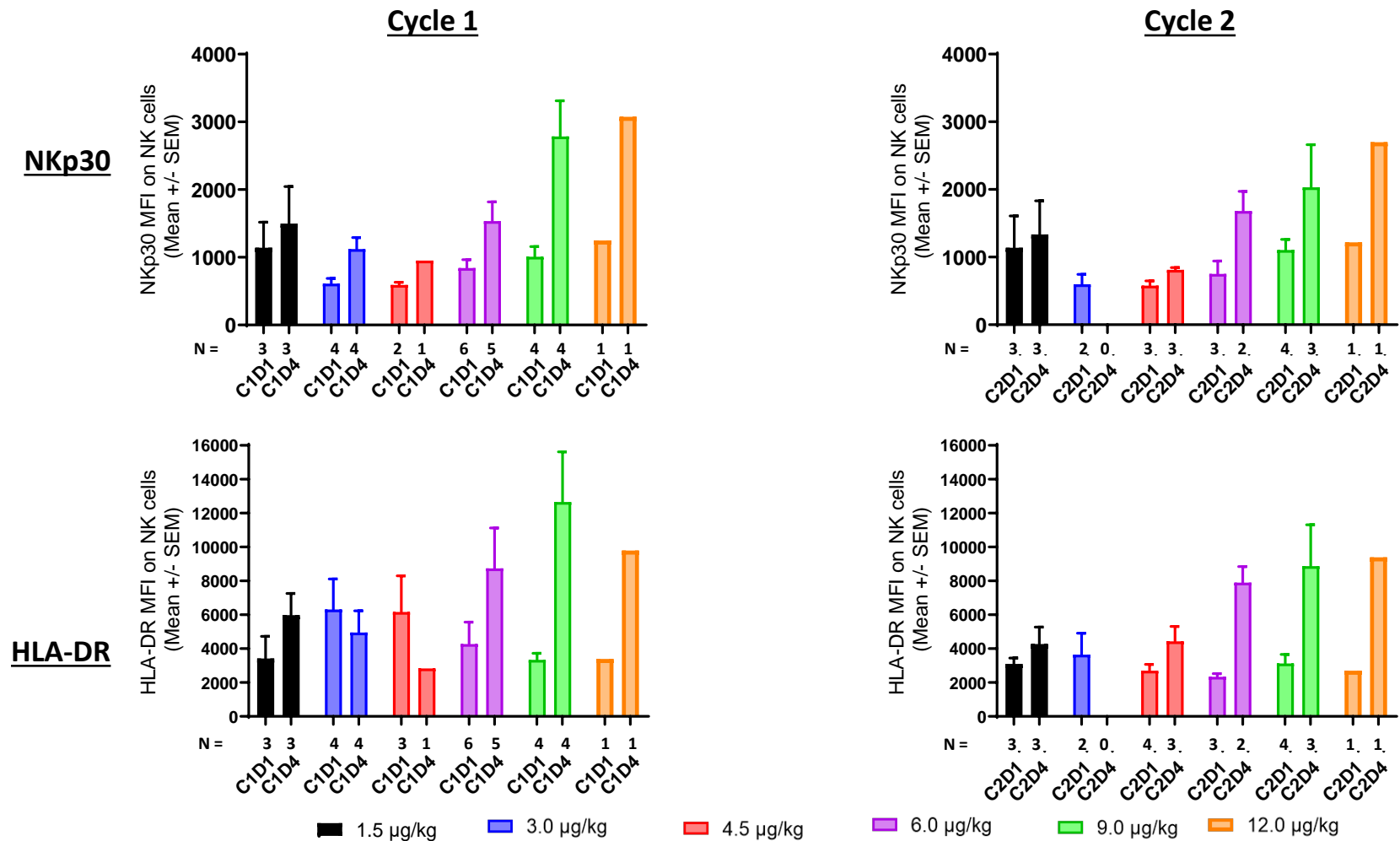
## Peak expansion and proliferation in Cycles 1 and 2



Fold change in cell numbers calculated from C1D1/predose; peak response of cellular expansion at D8-D10 of each cycle

Peak proliferative response at D4 for most patients; no Ki67 data available for 3.0  $\mu$ g/kg patients in C2

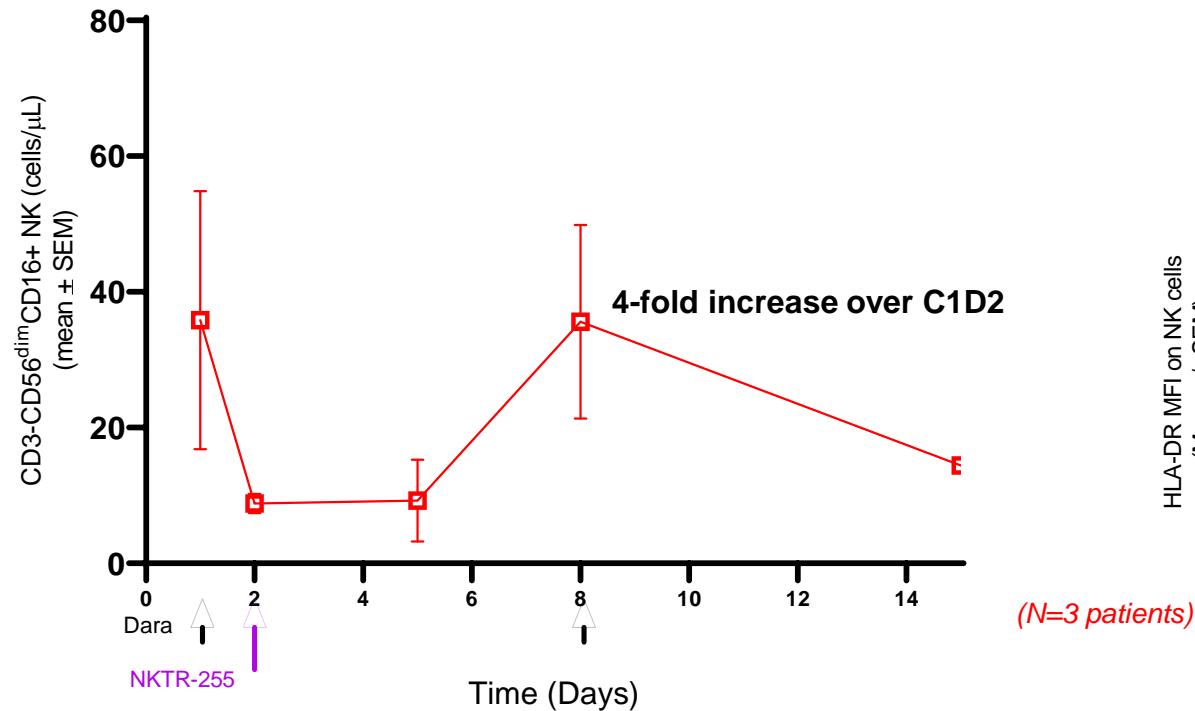
# ASH 2022: NKTR-255 Monotherapy Increased Activation Markers on NK cells



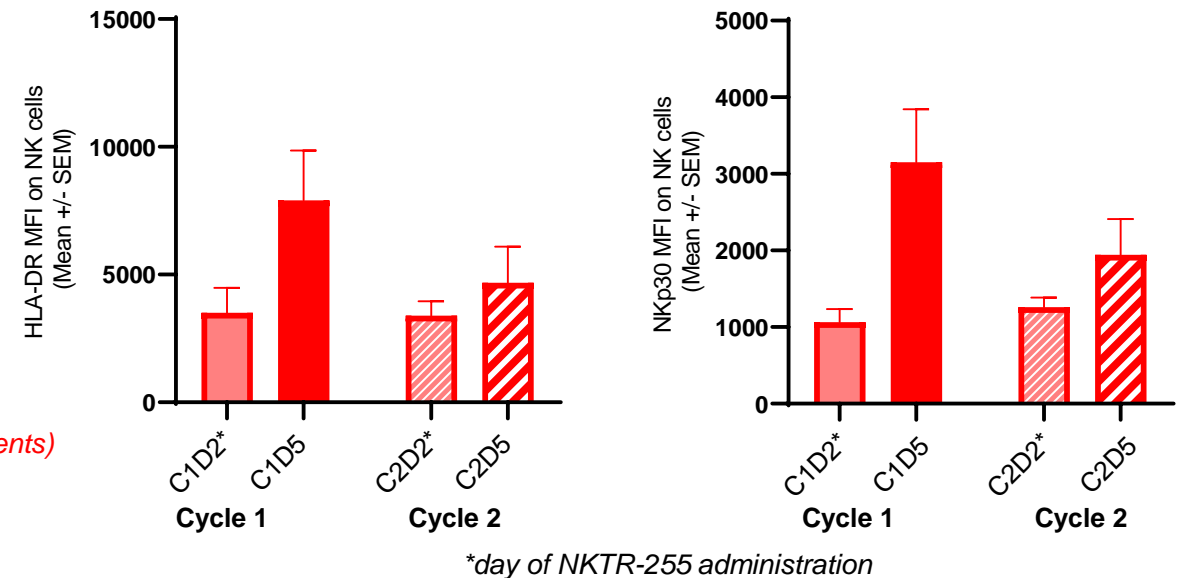


# ASH 2022: Absolute Number of CD16+ NK cells and NK Activation Markers Increased in Response to 4.5 µg/kg NKTR-255 After Administration of Daratumumab

Absolute Number of CD56<sup>dim</sup>CD16+ NK Cells

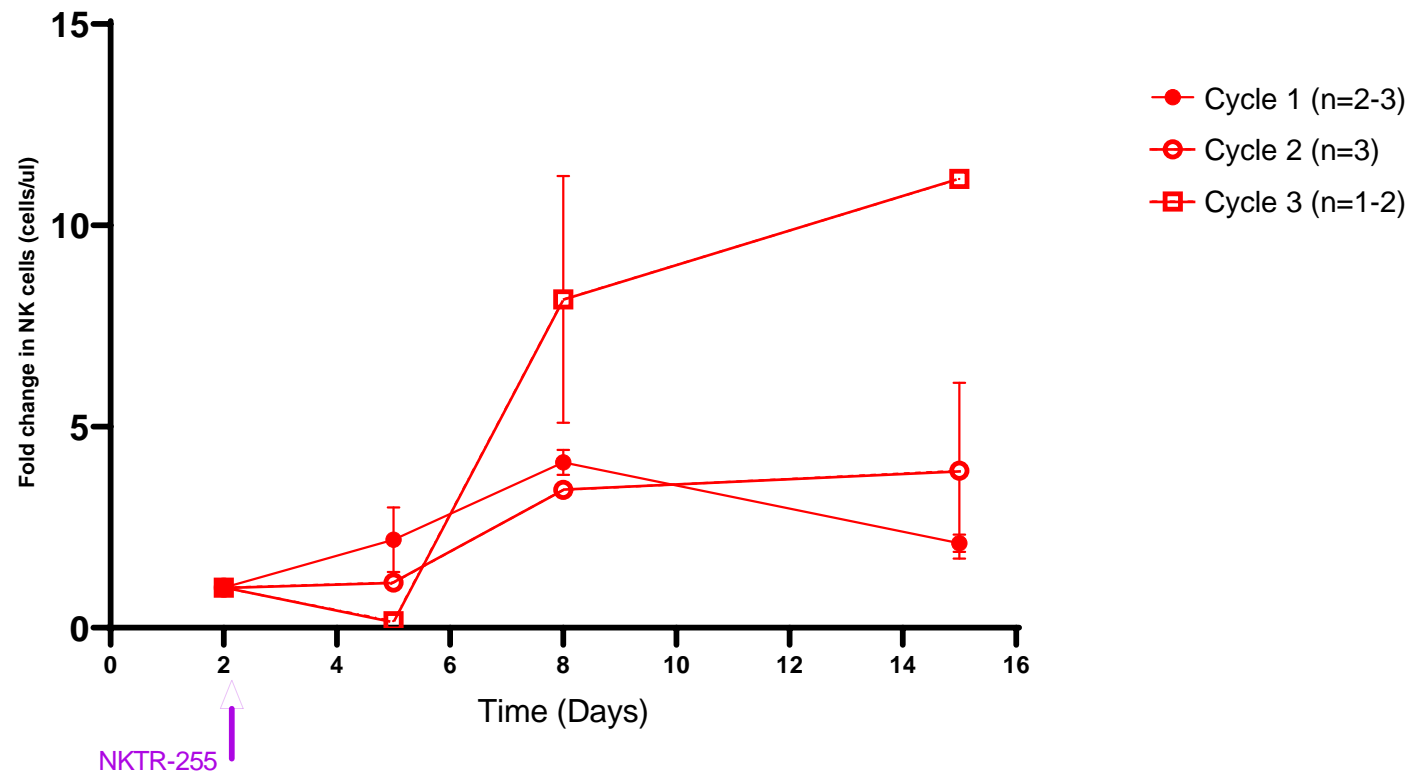


Activation Marker Expression on Total NK Cells



# ASH 2022: Absolute Number of NK Cells Rescued with NKTR-255 After Daratumumab Administration Over Multiple Cycles in Patients with $\geq 3$ Prior Lines of Treatment

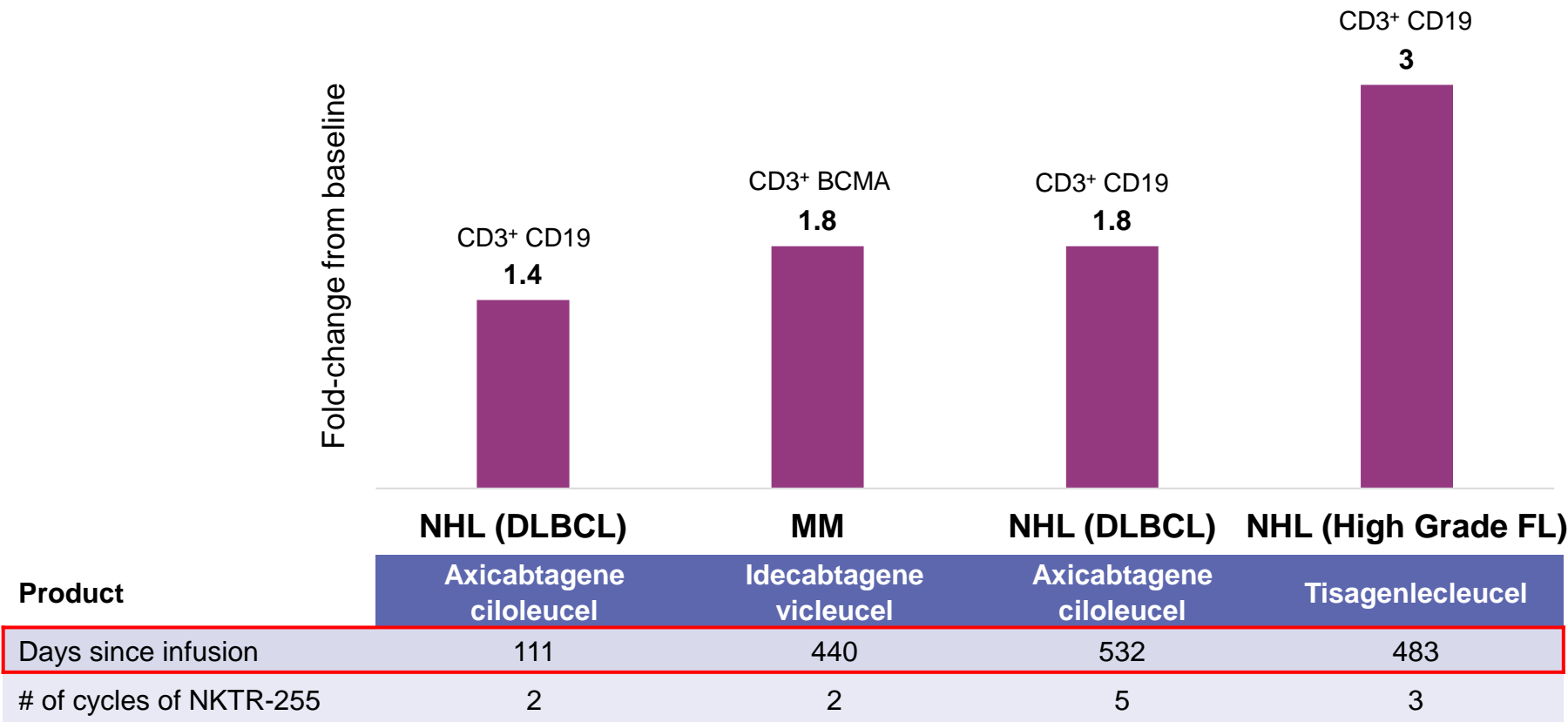
## Fold change in NK cell Increase Across Cycles



- NK cell expansion was maintained in subsequent cycles of treatment with NKTR-255.
- All of the patients receiving combination therapy showed disease stabilization.

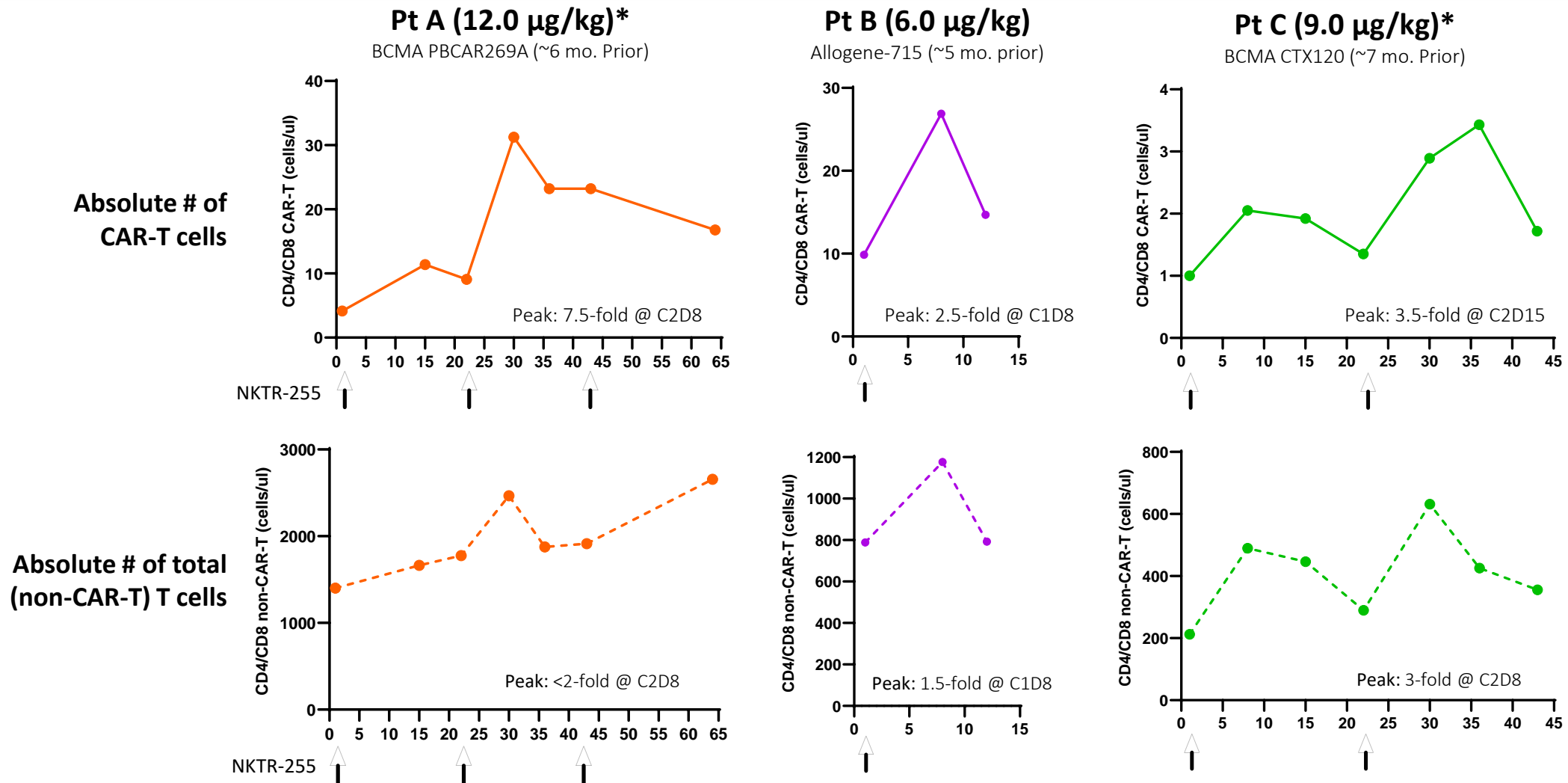
# ASH 2021: NKTR-255 Monotherapy Increased CAR-T Cell Levels in Patients Greater than 1 Year Past CAR-T Infusion

Clinical Characteristics and Pharmacodynamic Effects Following NKTR-255 Treatment in Patients with Detectable\* CAR-T/CAR-NK Cell Counts at Baseline



All patients had achieved a partial or complete response to prior CAR-T therapy. Pharmacodynamic data were analyzed for patients with measurable CAR-T cells at baseline; fold change was calculated as treatment with NKTR-255 over baseline (baseline=1); CAR-T, chimeric antigen receptor T-cell therapy; CD, cluster of differentiation; DLBCL, diffuse large B-cell lymphoma; FL, follicular lymphoma; MM, multiple myeloma; NHL, non-Hodgkin lymphoma.

# ASH 2022: Allo-Reactivity to CAR-T Cells was Not Induced With NKTR-255 Monotherapy Treatment Amongst Patients Previously Treated with Off-the-Shelf Allogeneic CAR-T Cells



**NEKTAR** \*Continued expansion of CAR-T cell numbers with repeat administration of NKTR-255 (Pts A & C)

# Clinical Data Demonstrate that NKTR-255 Provides IL-15 Pathway Activation in Liquid and Solid Tumors

*NKTR-255 is designed to capture the full IL-15 pathway to increase NK cells and cytotoxic function*

Parameter	Liquid Tumor (NKTR-255-02)	Solid Tumor (NKTR-255-03)
Route of Administration*	IV, q3wk	IV, q3wk
Antibody-Like Dosing Pharmacokinetics: IV t <sub>1/2</sub> (hr)	27-87 hr	27.8 hr
NK cell expansion	Yes, 7-17-fold	Yes, 3-9-fold
NK cell proliferation	Yes	Yes
CD8 T cell expansion	Yes, 2-3-fold	Yes, 2-3-fold
CD8 T cell proliferation	Yes	Yes
Upregulation of activation markers (HLA-DR, CD107a, NKp30, and Granzyme B) on NK cells	Yes	Yes

## Additional Messages:

- ▶ Consistent level of NK and CD8+ T cell expansion and proliferation in multiple tumor types (NHL, MM, CRC, SCCHN)
- ▶ NK and CD8+ T cell elevations observed in MM patients with compromised bone marrow, even in presence of doublet with Dara
- ▶ Optimized PK/PD profile for both monotherapy and in combination with targeted antibodies

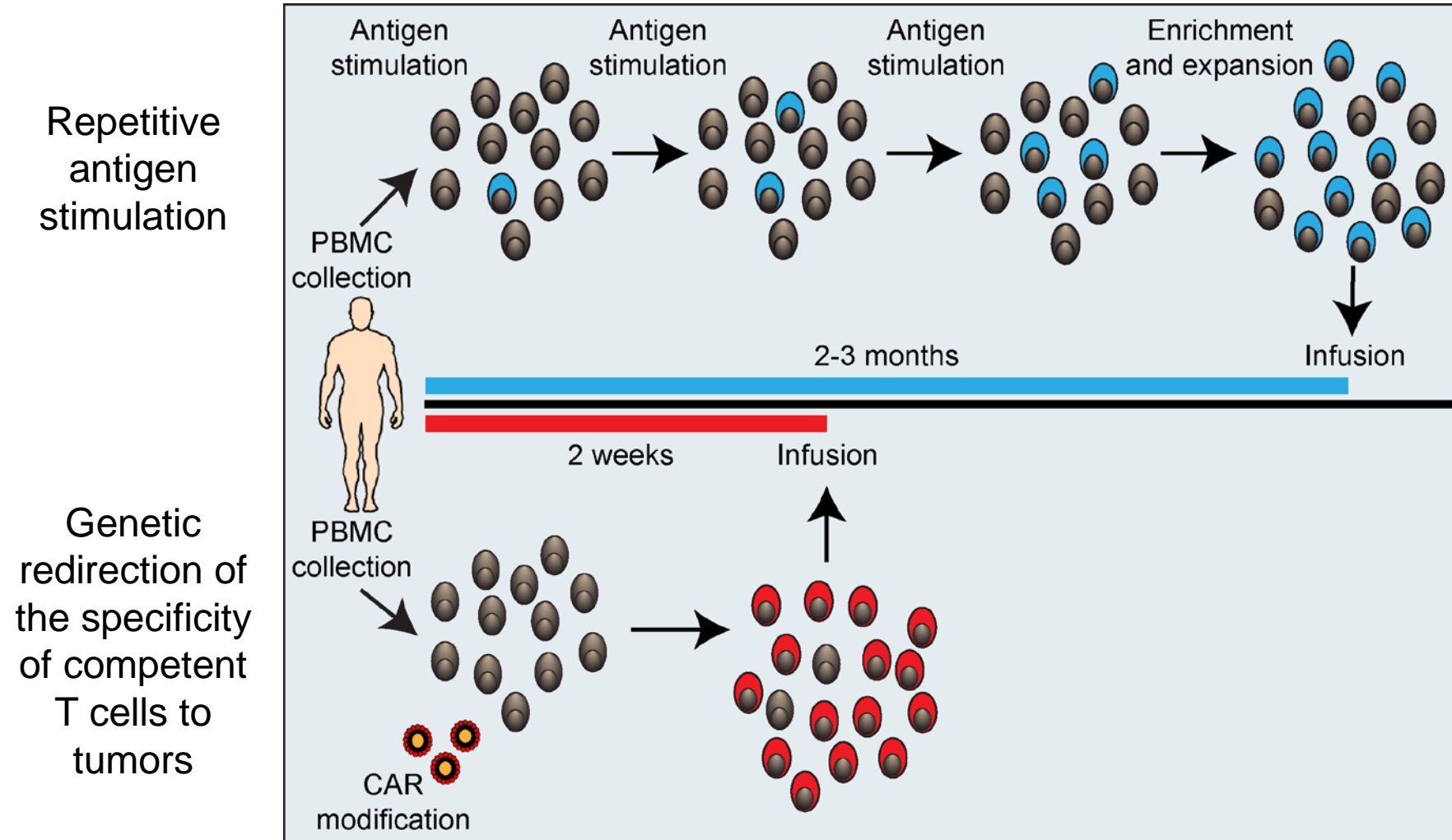


# Agenda

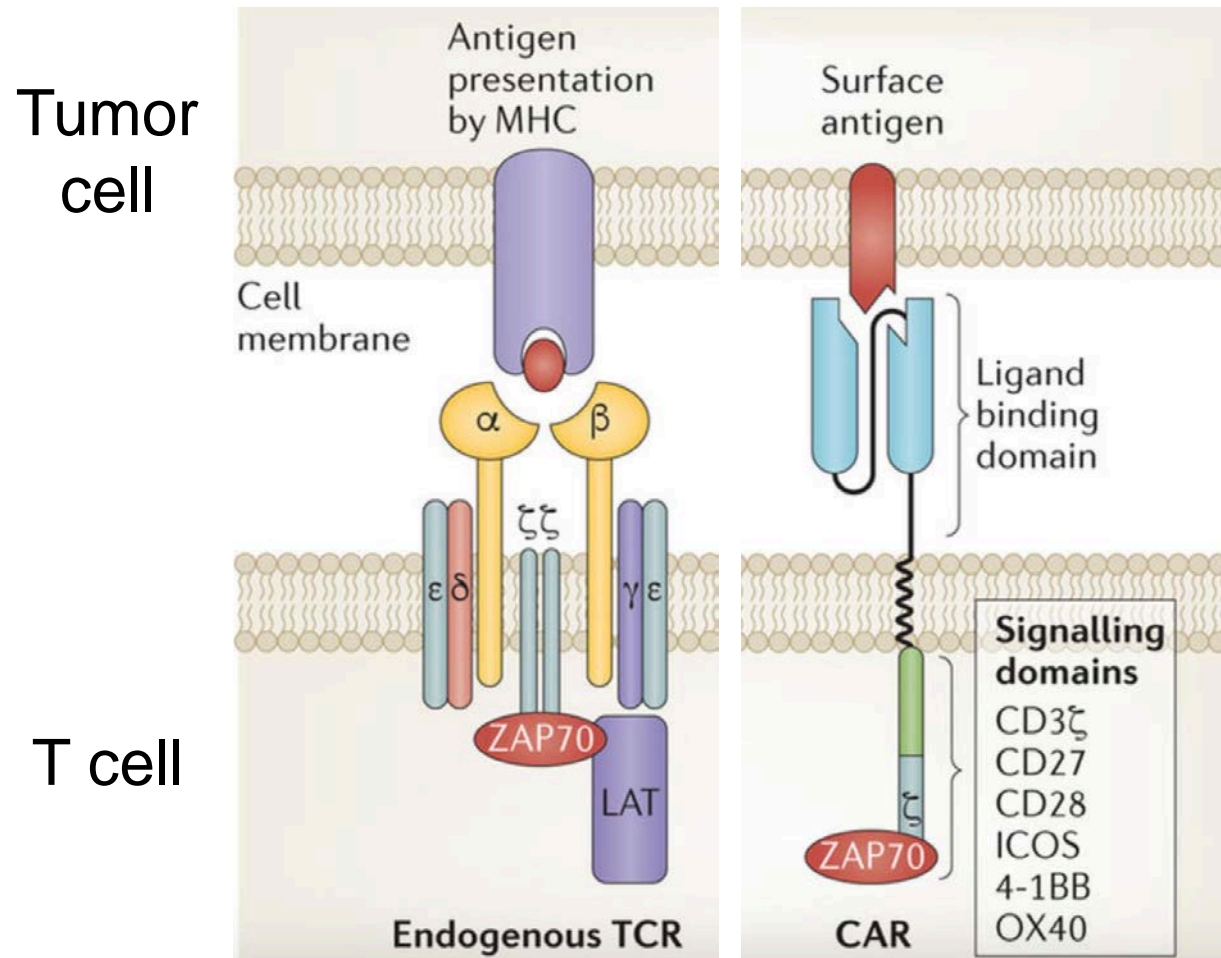
## Role of IL-15 within the Cell Therapy Landscape

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- **Ongoing and Planned Studies**
  - *Mary Tagliaferri, MD, Nektar Therapeutics*
- **Q&A Session**

# Redirection of T Cell Specificity by Genetic Modification



# Structure of Native T Cell Receptors and Recombinant Chimeric Antigen Receptors



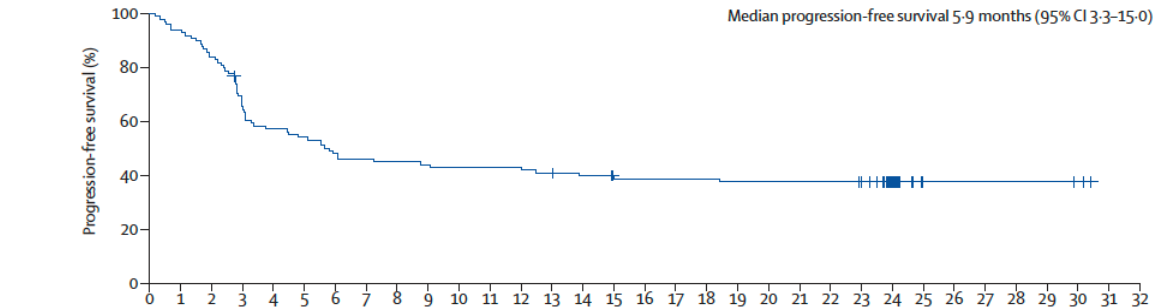
## CARs

- Target surface molecules
- No HLA restriction
- ‘In-line’ costimulation
- Engineered T cell subsets can be redirected to an appropriate target antigen

# Durable Responses Achieved in Patients with R/R LBCL After Treatment with Different CD19 CAR-T Cell Products

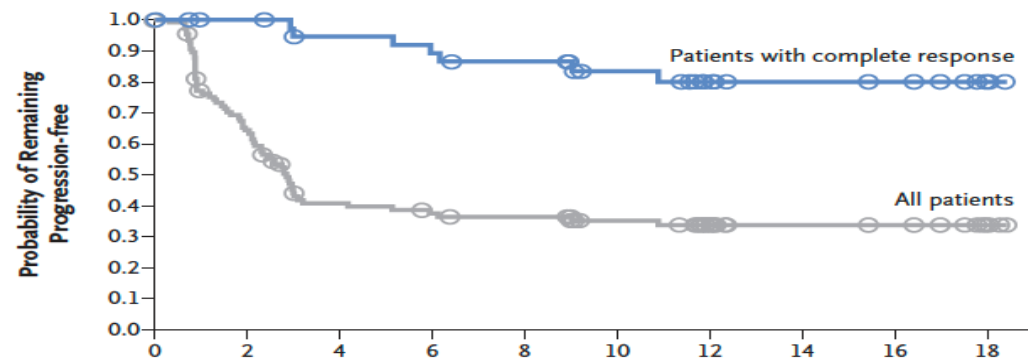
## ZUMA-1 – axicabtagene ciloleucel

Follow-up, median (interquartile range), months: 27.1 (25.7-28.8)  
Locke FL, et al. *Lancet Oncol.* 2018



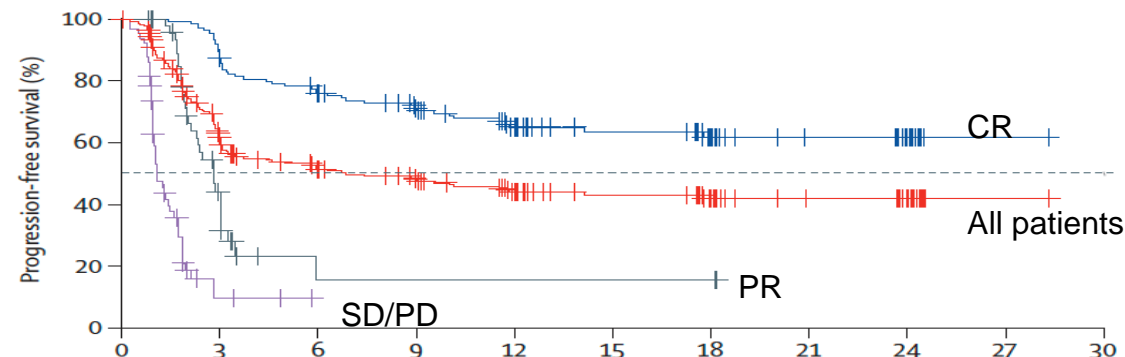
## JULIET – tisagenlecleucel

Follow-up, median (range), months: 14.0 (0.1-26)  
Schuster SJ, et al. *N Engl J Med.* 2018



## TRANSCEND NHL 001 – lisocabtagene maraleucel

Follow-up, median (95% CI), months: 12.3 (12.0-17.5)  
Abramson JS, et al. *The Lancet.* 2020

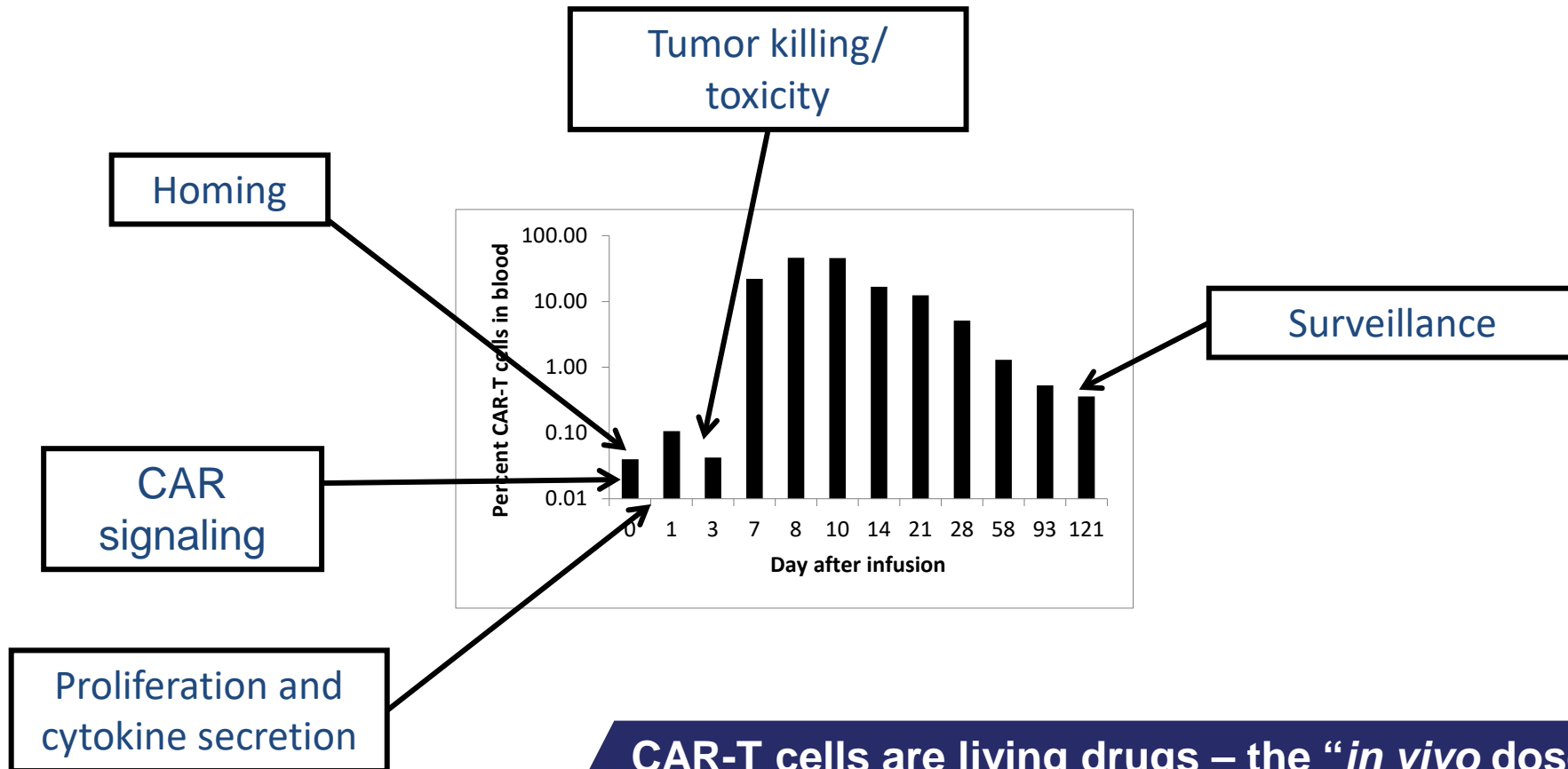


Despite paradigm-changing outcomes for R/R LBCL, ~60% of patients failed to achieve durable CR after CD19 CAR-T cells

# **Novel Strategies are Needed to Improve CR Rates and Enhance Duration of Responses of CAR-T Therapies**

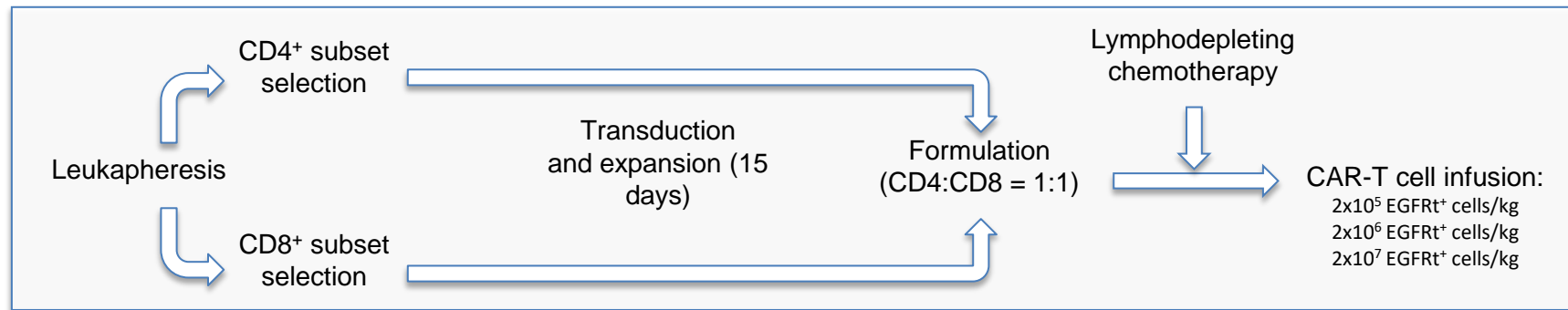
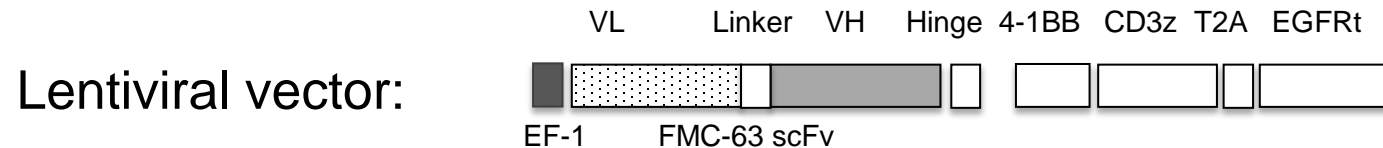


# CAR-T Cells: A Living Drug



**CAR-T cells are living drugs – the “*in vivo* dose” depends on the cell dose, the antigen burden, lymphodepletion regimen, and other patient/treatment/tumor characteristics**

# Clinical Trial of Defined Composition CD19 CAR-T Cells for B Cell Malignancies (NCT01865617)



## Eligibility

- R/R CD19<sup>+</sup> B cell malignancy (B-ALL, NHL, CLL)
- ≥ 18 years

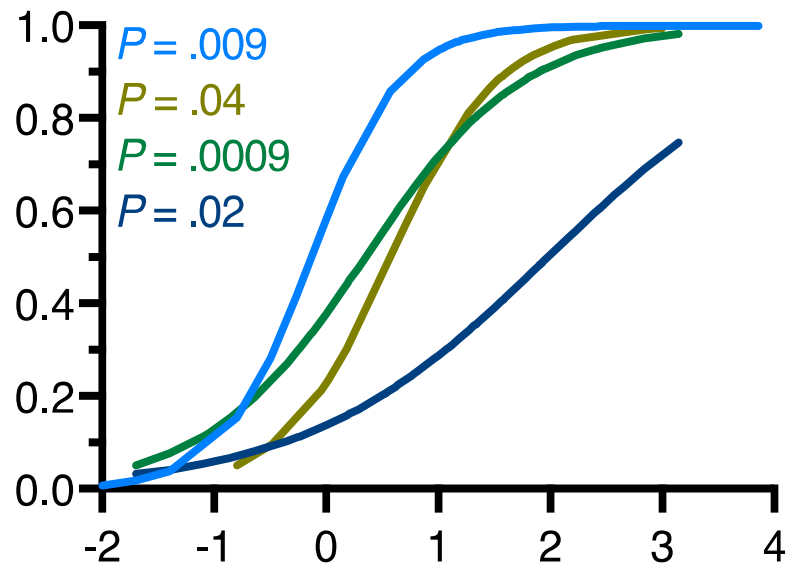
## 197 treated

- 197 treated
- ALL, n=65
- NHL, n=82
- CLL/Richter's, n=50

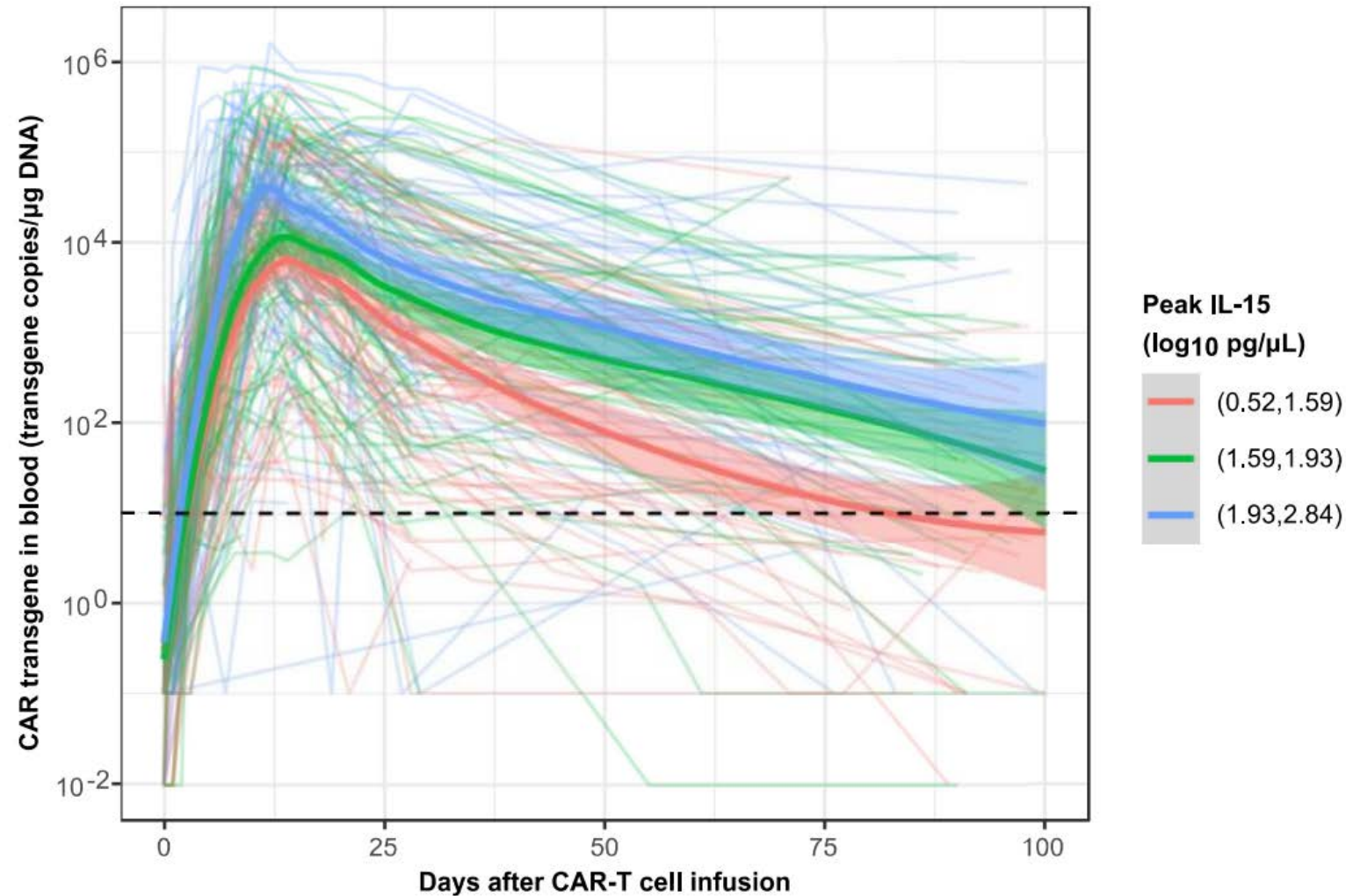
## Responses

B-ALL: 85% MRD-neg CR  
NHL: Aggressive (n=47): 40% CR  
NHL: Indolent (n=10): 89% CR  
CLL/Richter's (n=24): 21% CR

# *In Vivo* CAR-T Cell Counts are Associated with Response

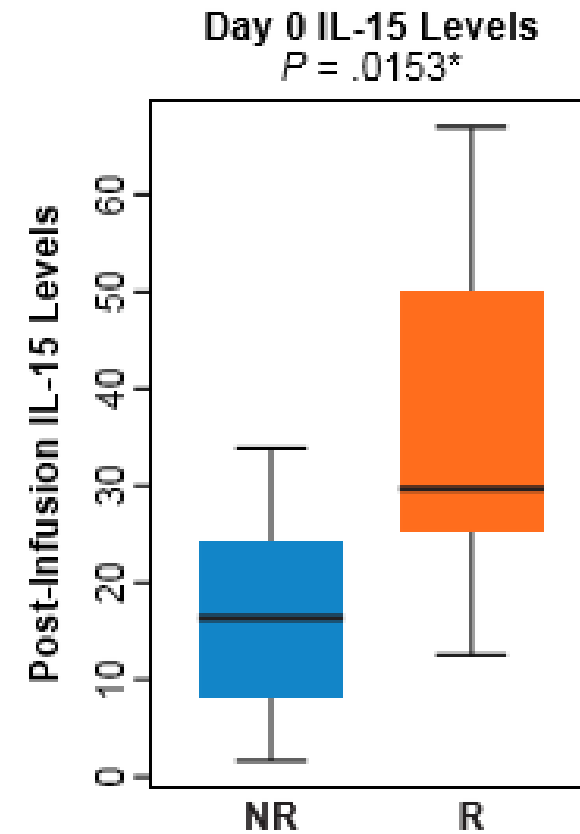


# Higher Peak of IL-15 is Associated with Higher CD19 CAR-T Cell $AUC_{0-90}$ in Humans



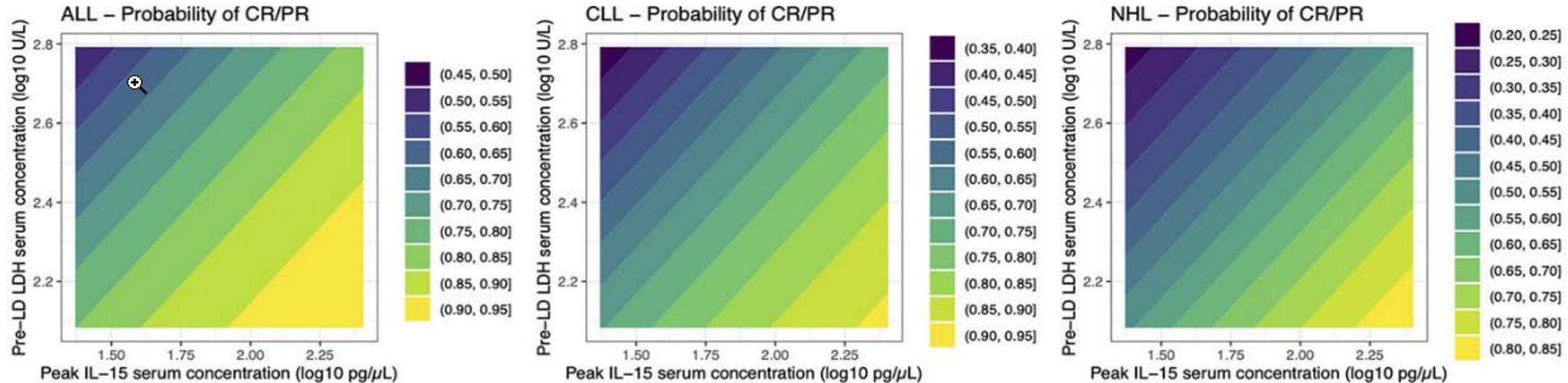
# IL-15 Levels Associate with CAR-T Cell Counts and Response to CD19 CAR-T Cell Immunotherapy in LBCL

Kochenderfer et al, JCO, March 2017



Rossi et al, Blood, June 2018

# High IL-15 is Associated with Response to CD19 CAR-T Cell Therapy in High- and Low-risk B-ALL, CLL and NHL



Probabilities of CR/PR were adjusted to Cy/Flu lymphodepletion and are shown in color-coded contours. Responses defined by 2019 NCCN guidelines for ALL, 2018 iwCLL for CLL, and 2014 Lugano criteria for NHL. Abbreviations: LD, lymphodepletion; ALL, acute lymphoblastic leukemia; CLL, chronic lymphocytic leukemia; NHL, non-Hodgkin lymphoma; CR, complete response; PR, partial response; LDH, lactate dehydrogenase.

**Association of IL-15 with response is evident in both *high- and low-risk disease***

# Rationale for Combining NKTR-255 with CD19 CAR-T Cell Therapy

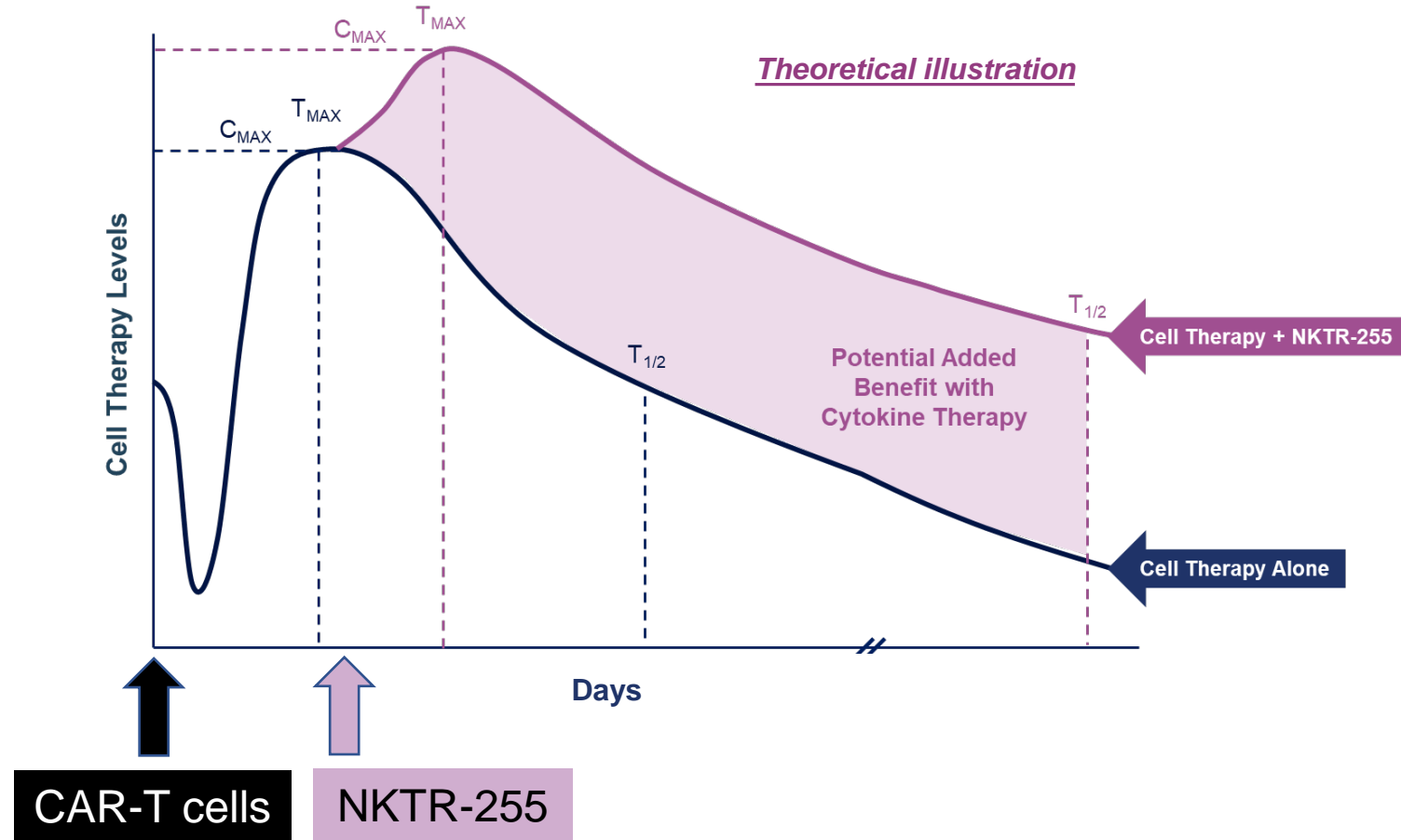
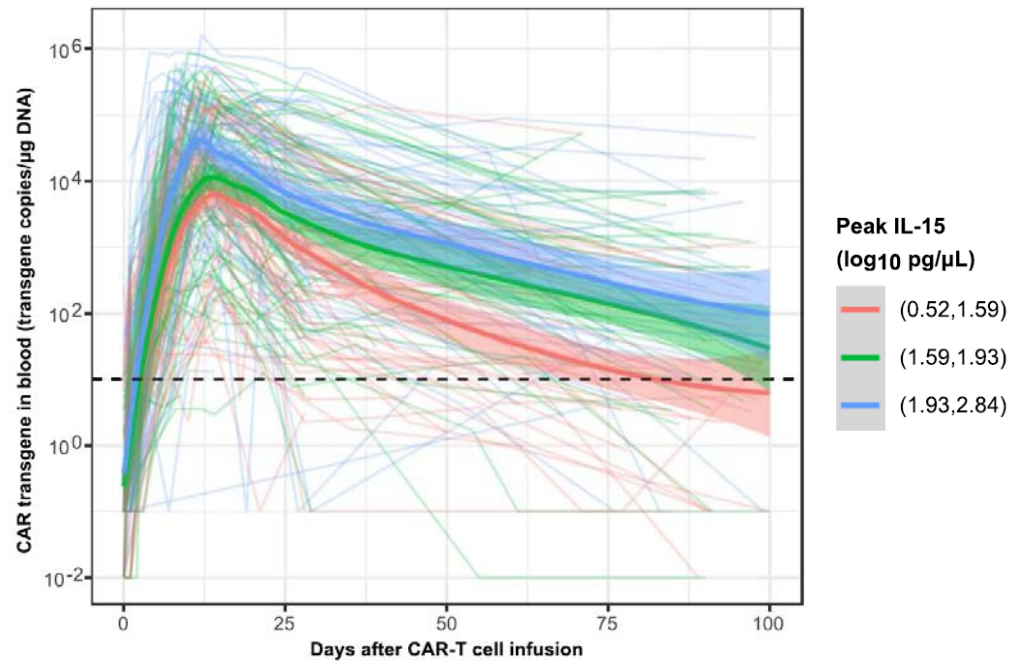
- Approximately 60% of LBCL patients treated with CD19 CAR-T cells fail to achieve durable CR
- Poor *in vivo* CAR-T cell counts are a key reason for failure of CAR-T cell therapy
- High IL-15 levels promote higher *in vivo* counts and higher AUC of CAR-T cells
- High IL-15 levels associate with better response rates to CD19 CAR-T cell therapy

*Exogenous IL-15 supplementation is the logical way forward*

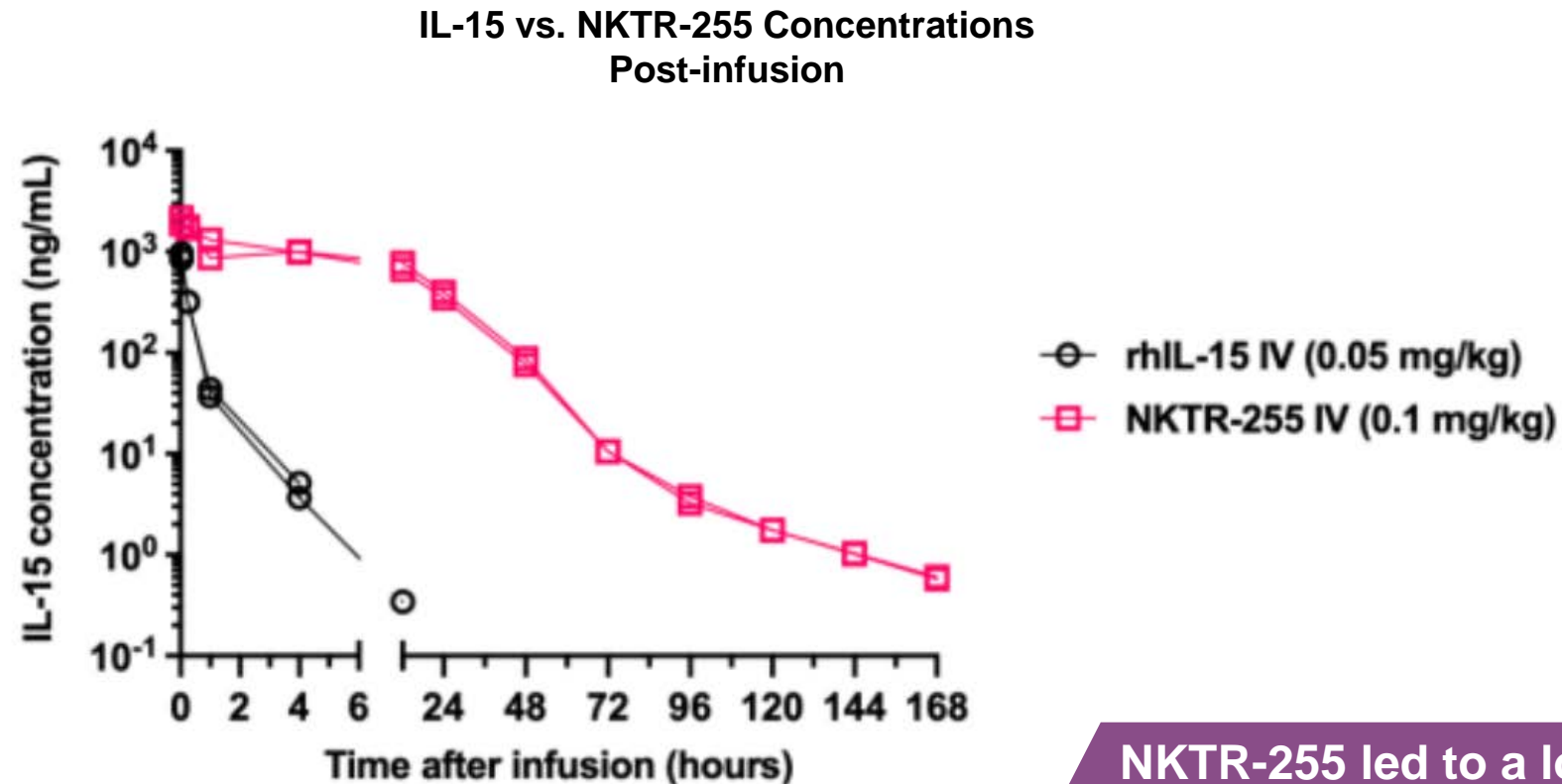


# Combining Cell Therapy with Exogenous Cytokine May Increase Cmax and Extend CAR-T Cell Persistence in LBCL

Higher peak IL-15 levels correlate with higher CD19 CAR-T cell AUC0-90



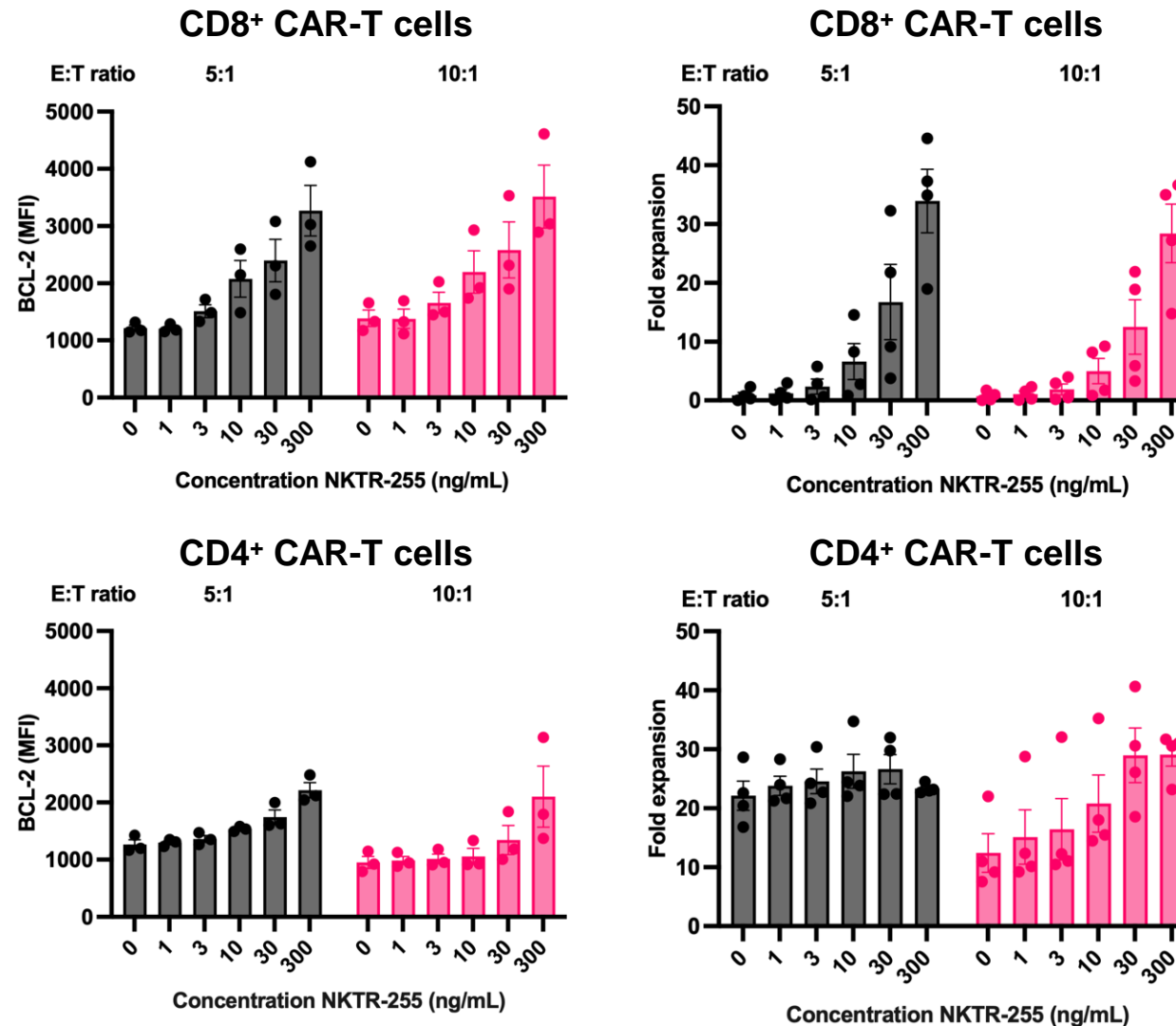
# Higher AUC of NKTR-255 Compared to Native rhIL-15 in Non-human Primates



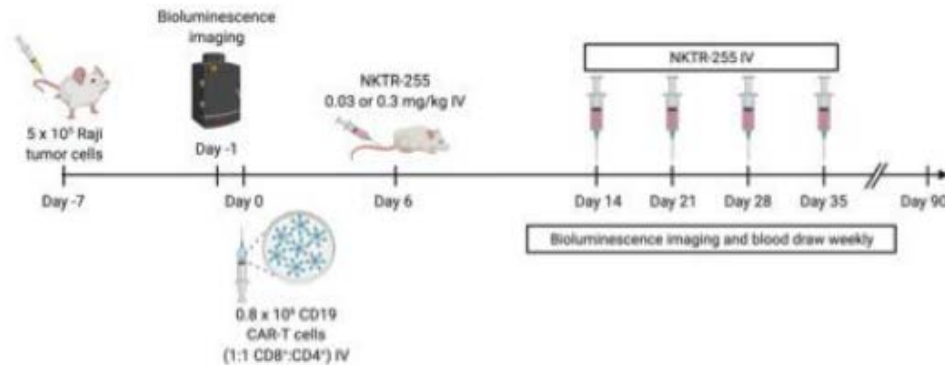
NKTR-255 led to a longer IL-15 half-life (30.5 vs. 1.2 hours)

# Human CD19 CAR-T Cells Exhibit a Dose-dependent Response to NKTR-255 at High and Low Antigen Burden

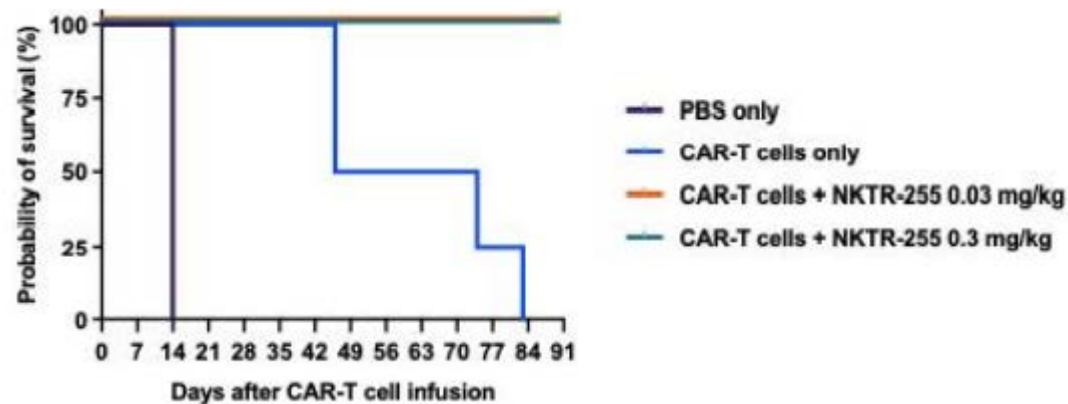
CD19 CAR-T cells + K562-CD19



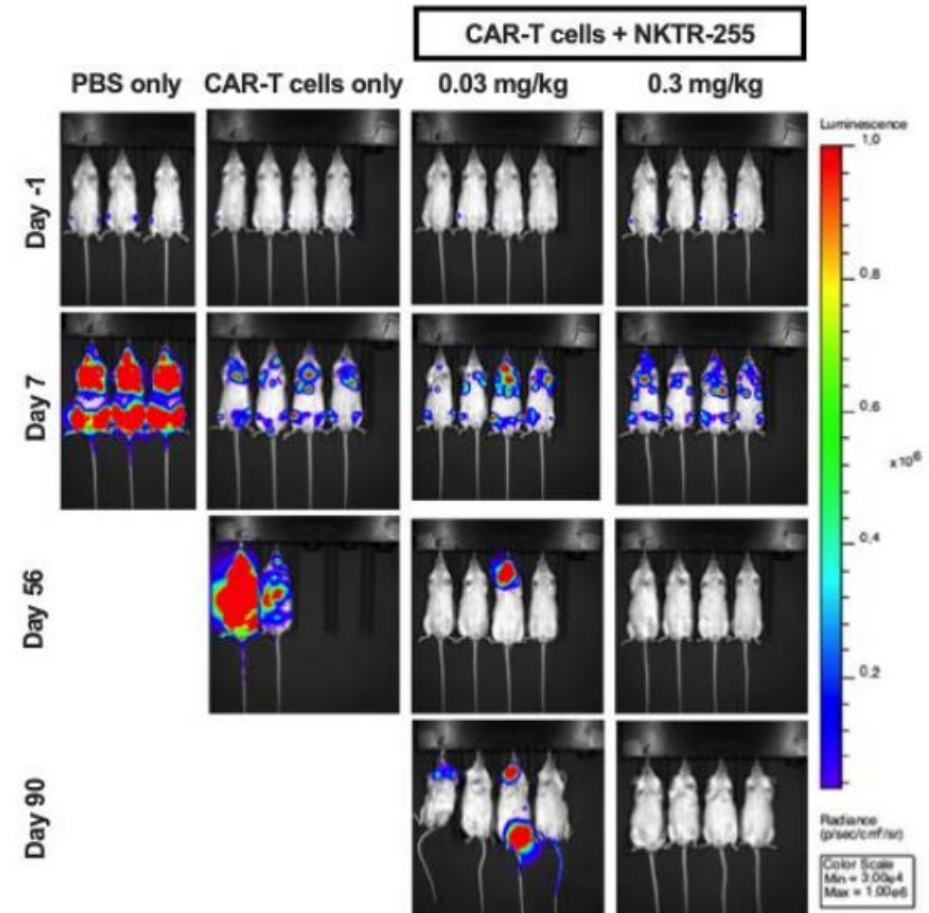
# NKTR-255 Induces Dose-dependent Increased *In Vivo* Anti-tumor Efficacy of Human CD19 CAR-T Cells



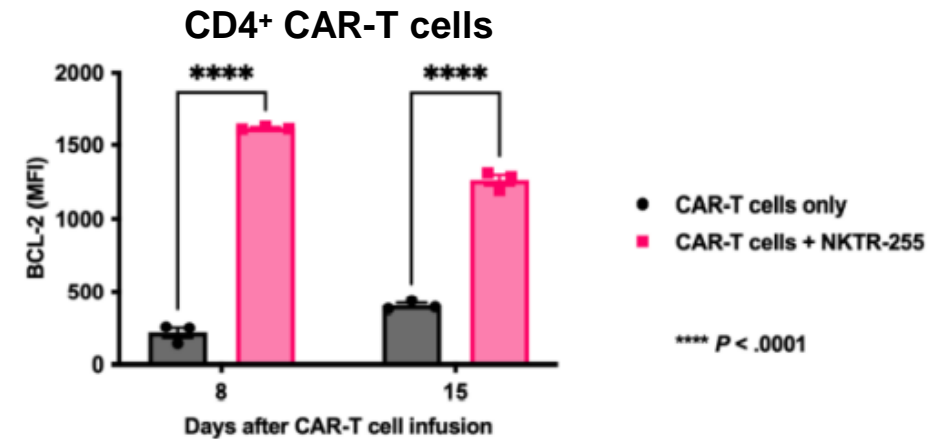
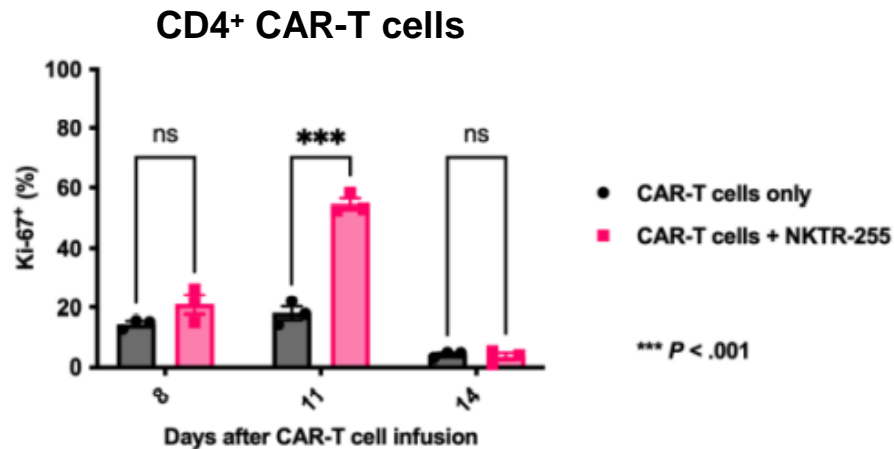
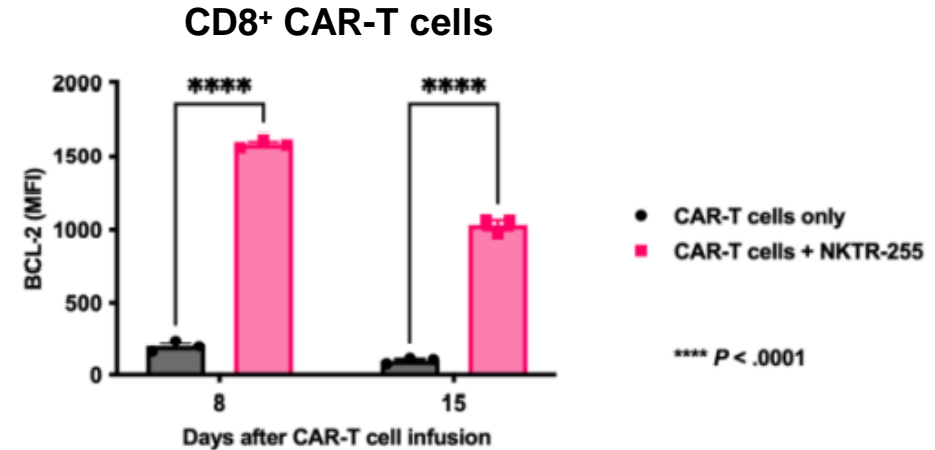
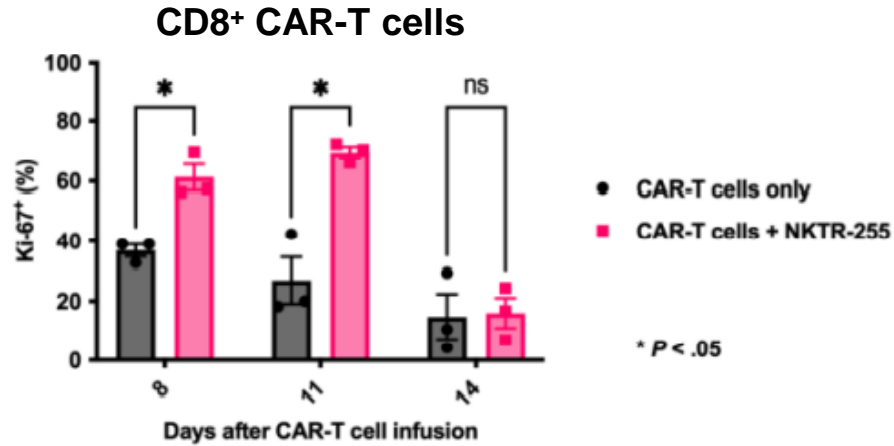
Kaplan-Meier Survival Curve



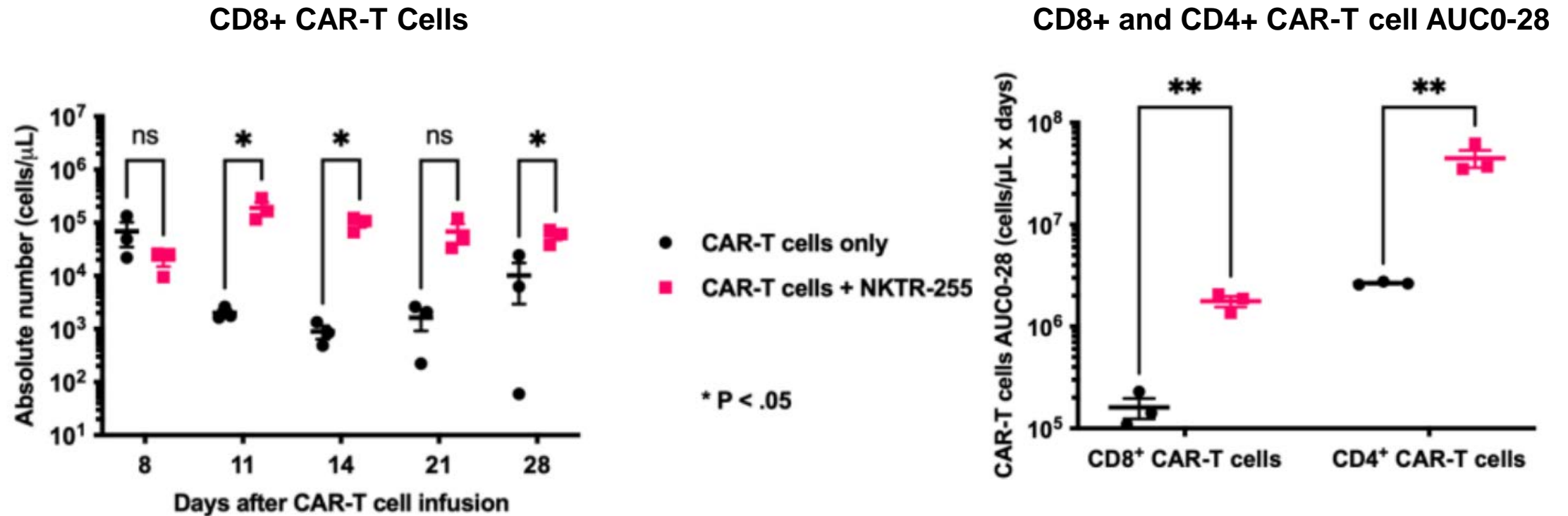
Bioluminescence Imaging of Raji Tumor Burden at Indicated Timepoints



# NKTR-255 Increases Proliferation and Anti-apoptotic Bcl-2 in Human CAR-T Cells in Marrow of Lymphoma Bearing Mice

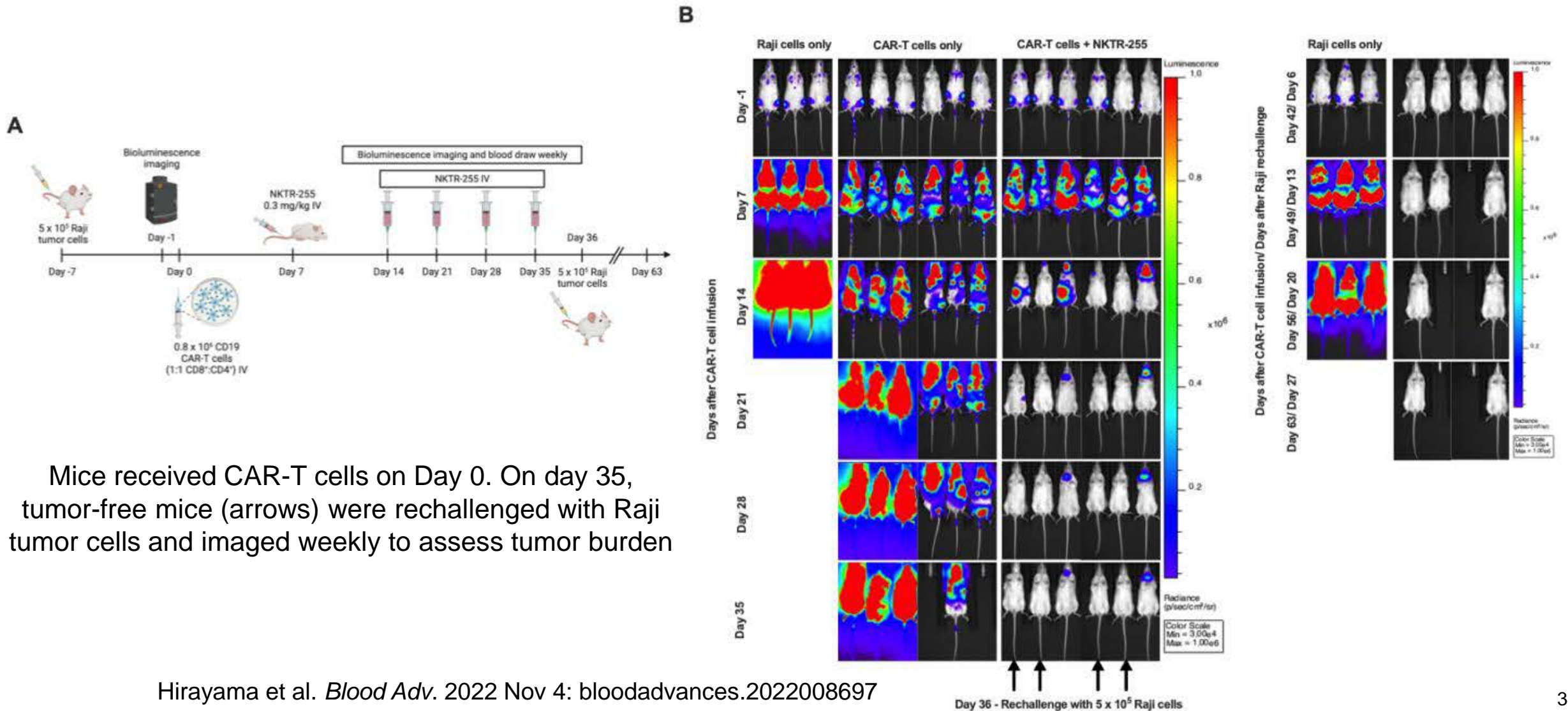


# NKTR-255 Increases Accumulation of Human CAR-T Cells in Marrow of Lymphoma Bearing Mice





# Robust and Durable CAR-T cell Function after NKTR-255 Supplementation is Demonstrated by Rejection of Tumor Rechallenge





# Summary











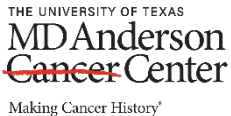


- Although CAR-T cell therapy is a paradigm-changing cancer treatment, 60% of LBCL patients still fail to achieve durable CR after CD19 CAR-T cell immunotherapy
- In LBCL patients high IL-15 is associated with better *in vivo* CAR-T cell counts and better efficacy of CD19 CAR-T cells in both high- and low-risk disease
- NKTR-255 is a novel IL-15 agonist that demonstrates favorable pharmacokinetics compared to rhIL-15 in non-human primates
- NKTR-255 enhanced the proliferation and survival of competent human CD19 CAR-T cells, enabling better anti-tumor efficacy in immunodeficient mice bearing human lymphoma treated with human CAR-T cells
- The data provide strong rationale to support studies of NKTR-255 supplementation in adoptive T cell therapies

# Agenda

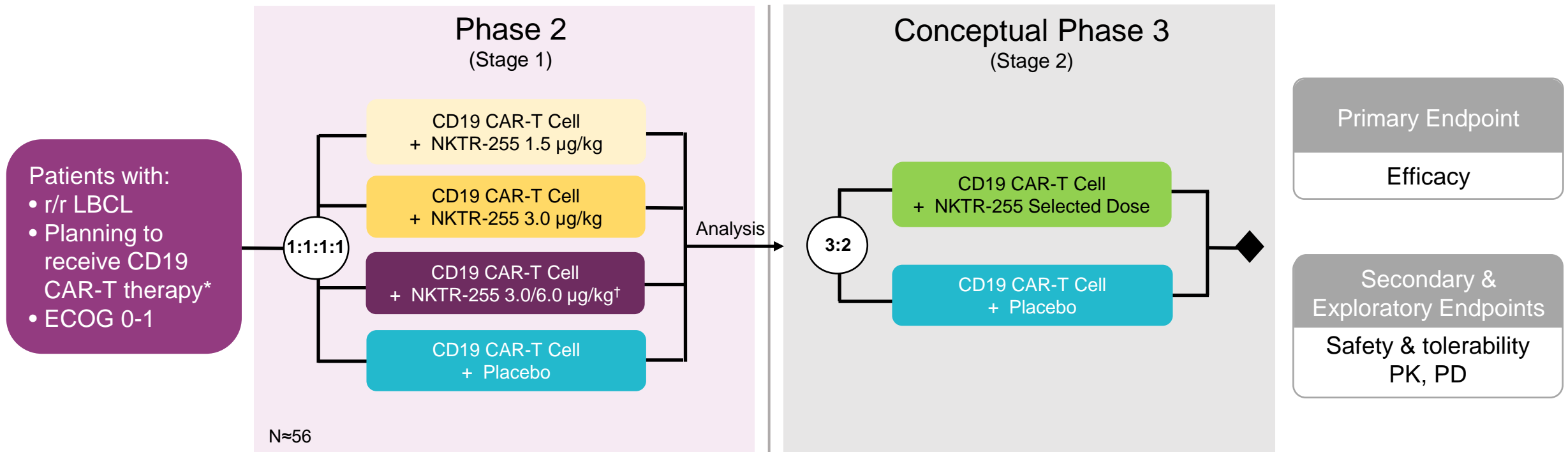
## Role of IL-15 within the Cell Therapy Landscape

- **ASH 2022: “Safety, Tolerability, PK/PD, and Preliminary Efficacy of NKTR-255, a Novel IL-15 Receptor Agonist, in Patients with Relapsed/Refractory Hematologic Malignancies”**
  - Mary Tagliaferri, MD, Nektar Therapeutics
- **Overview of Cell Therapy Landscape and Rationale for NKTR-255 Combination with CAR-T**
  - Cameron Turtle, MBBS, PhD, University of Sydney and Fred Hutchinson Cancer Center (Turtle Lab)
- **Ongoing and Planned Studies**
  - Mary Tagliaferri, MD, Nektar Therapeutics
- **Q&A Session**

# NKTR-255 Clinical Program Focus

	Program	Phase	Indication	Partner
Liquid Tumors	NKTR-255 +  	Phase 2/3	Diffuse Large B-Cell Lymphoma	  <b>FRED HUTCH</b> CURES START HERE™  <b>Stanford</b> MEDICINE
	NKTR-255 +  <i>Rituximab</i>	Phase 1/2 Dose Escalation	R/R Non-Hodgkin's Lymphoma <i>NCT04136756</i>	
	NKTR-255 +  <i>(daratumumab and hyaluronidase-fihj)</i> <small>Injection for subcutaneous use   1,800mg/30,000units</small>	Phase 1/2 Dose Escalation	R/R Multiple Myeloma <i>NCT04136756</i>	
	NKTR-255 + 	P1/2 IST in approved indication	Non-Hodgkin's Lymphoma Diffuse Large B-Cell Lymphoma <i>NCT05359211</i>	
	NKTR-255 + <i>Proprietary CD19/22 (unapproved)</i>	P1/2 IST	Relapsed/Refractory (r/r) B-ALL <i>NCT03233854</i>	
Solid Tumors	NKTR-255 +  <i>avelumab</i> <small>Injection 20 mg/mL</small>	Phase 2 Ongoing	Maintenance Treatment Bladder Cancer <i>NCT05327530 (Comparative Study)</i>	 Clinical Collaboration 50/50 Sponsored by Merck KGaA   THE UNIVERSITY OF TEXAS <b>MDAnderson</b> Cancer Center <small>Making Cancer History®</small>
	NKTR-255 +  <i>CETUXIMAB</i>	Phase 1/2 Dose Escalation	R/R Colorectal Cancer R/R Head and Neck Squamous Cell Carcinoma <i>NCT04616196</i>	
	NKTR-255 +  <i>durvalumab</i> <small>Injection for Intravenous Use 50 mg/mL</small>	P1/2 IST in approved indication	Stage 2 NSCLC Post Chemoradiation	

# Phase 2/3 Randomized Double-Blind, Placebo-Controlled Study of NKTR-255 vs Placebo Following CD19-Directed CAR-T Cell Therapy in LBCL



**Based upon results of the Phase 2 portion of the study, final design of the Phase 3 portion of the study will be determined, including NKTR-255 dose, sample size and endpoints of the study**

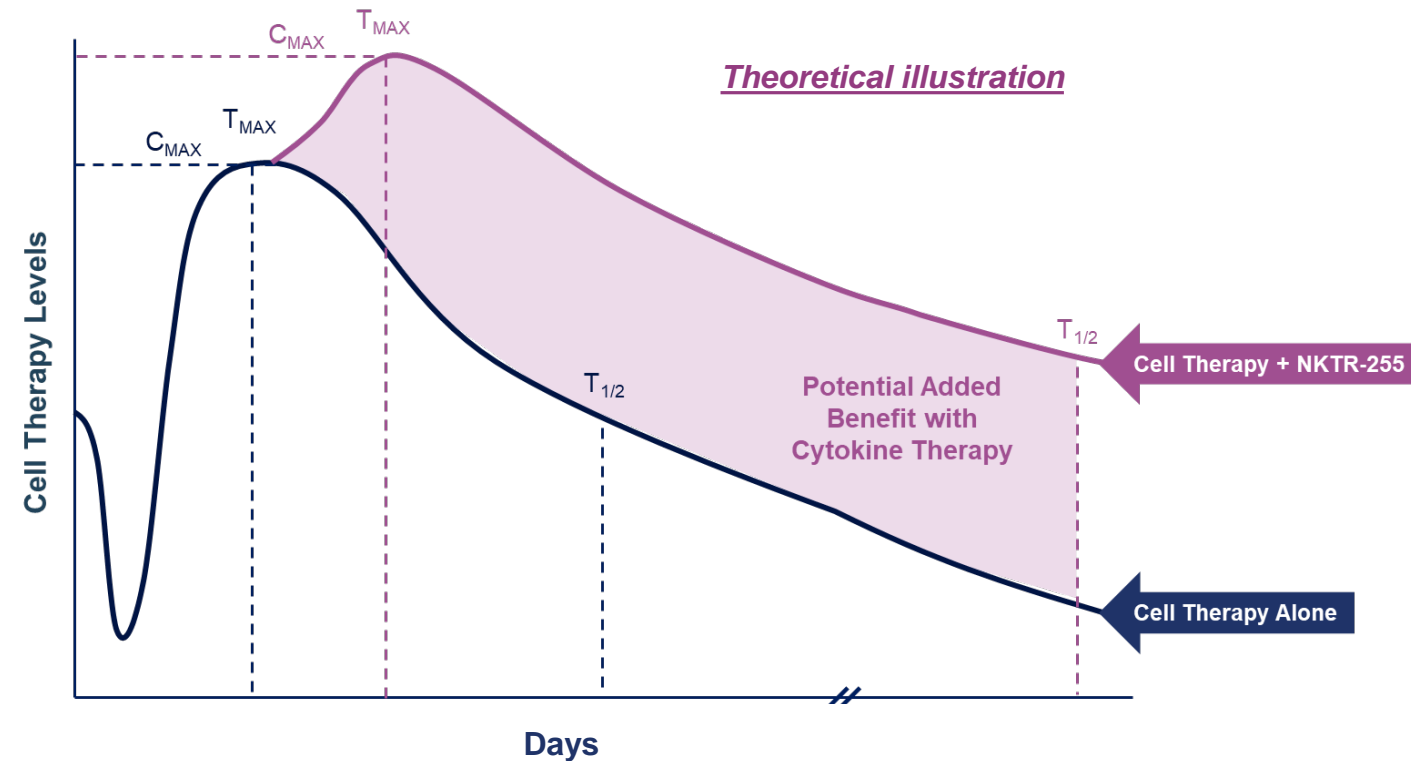
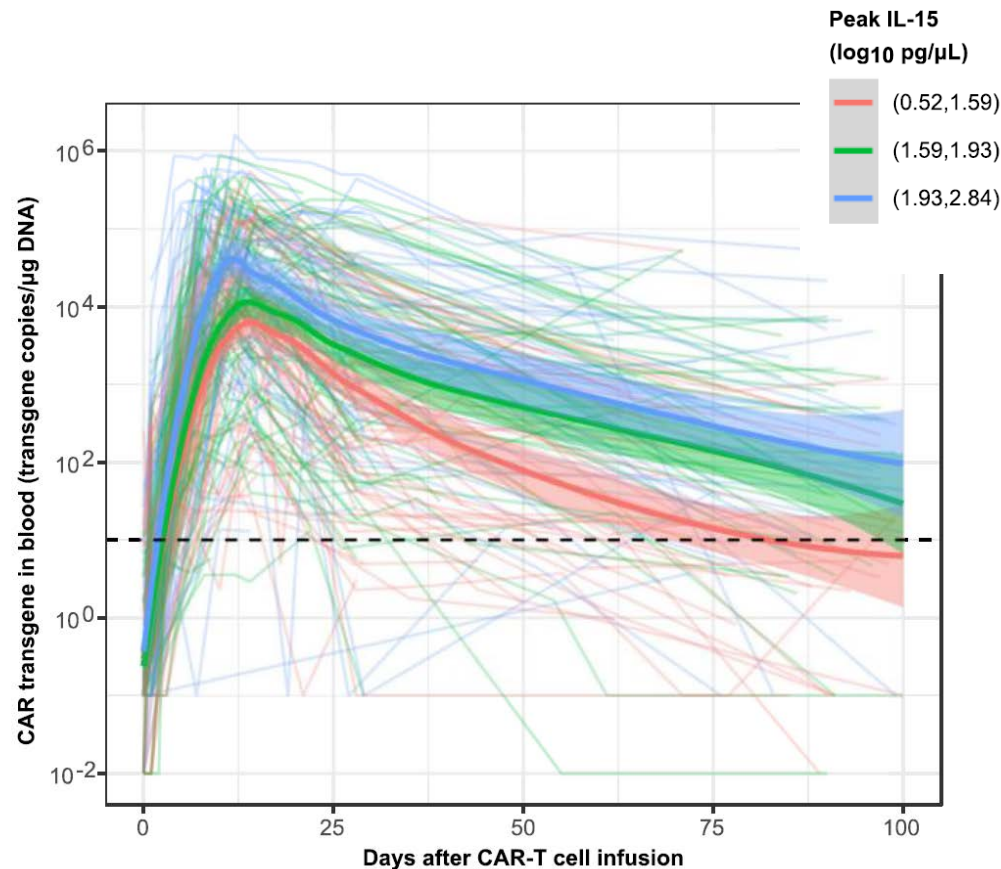
LBCL=large B-cell lymphoma; CAR-T=chimeric antigen receptor T-cell therapy; DL=dose level; PK=pharmacokinetics; PD=pharmacodynamics; r/r=relapse and refractory

\*CD19 CAR-T cell therapy includes axi-cel or liso-cel (or tisa-cel in Stage 2).

<sup>†</sup> Step-up dose regimen initiating with 3.0 µg/kg NKTR-255 in Cycle 1 and continuing in Cycle 2 and beyond with 6.0 µg/kg NKTR-255

Randomization will be stratified according to the cellular product that the patient receives (ie, axi-cel or liso-cel [or tisa-cel in Stage 2]) and baseline LDH, and should take place no more than 1 day prior to the first study drug administration.

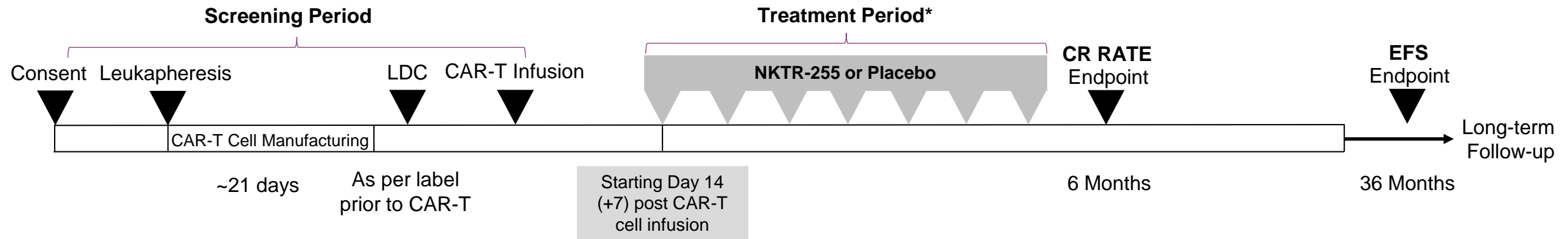
# Combining Cell Therapy with Exogenous Cytokine May Increase Cmax and Extend CAR-T Cell Persistence in LBCL



**Higher peak IL-15 levels correlate with higher CD19 CAR-T cell AUC0-90 in humans.**

CAR transgene (FlapEF1α copies/μg DNA) is shown as polynomial regression lines for three distinct tertiles of serum IL-15 peak concentration. Shaded areas represent 95% CI of the LOESS estimates.<sup>11</sup>

# NKTR-255 or Placebo Dosed Following Commercially Approved CD19-Directed CAR-T Cell Therapy



\*Study drug (NKTR-255 or placebo) infusion will be administered every 3 weeks (q3w) for up to 7 cycles or 5 months, whichever is earlier.

# Q&A session



**Mary Tagliaferri, MD**

Chief Development Officer  
at Nektar Therapeutics



**Mario Marcondes, MD, PhD**

VP, Head of Clinical Development  
at Nektar Therapeutics



**Cameron Turtle, MBBS, PhD**

Chair of Cancer Immunotherapy  
at University of Sydney and  
Fred Hutchinson Cancer Center  
affiliate



**Poster 3335:** A Phase 2/3, Randomized, Double Blind, Placebo-Controlled, Multicenter Study of NKTR-255 Vs Placebo Following CD-19 Directed CAR-T Therapy in Patients with Relapsed/Refractory Large B-Cell Lymphoma



**Poster 4652:** Safety, Tolerability, PK/PD, and Preliminary Efficacy of NKTR-255, a Novel IL-15 Receptor Agonist, in Patients with Relapsed/Refractory Hematologic Malignancies



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