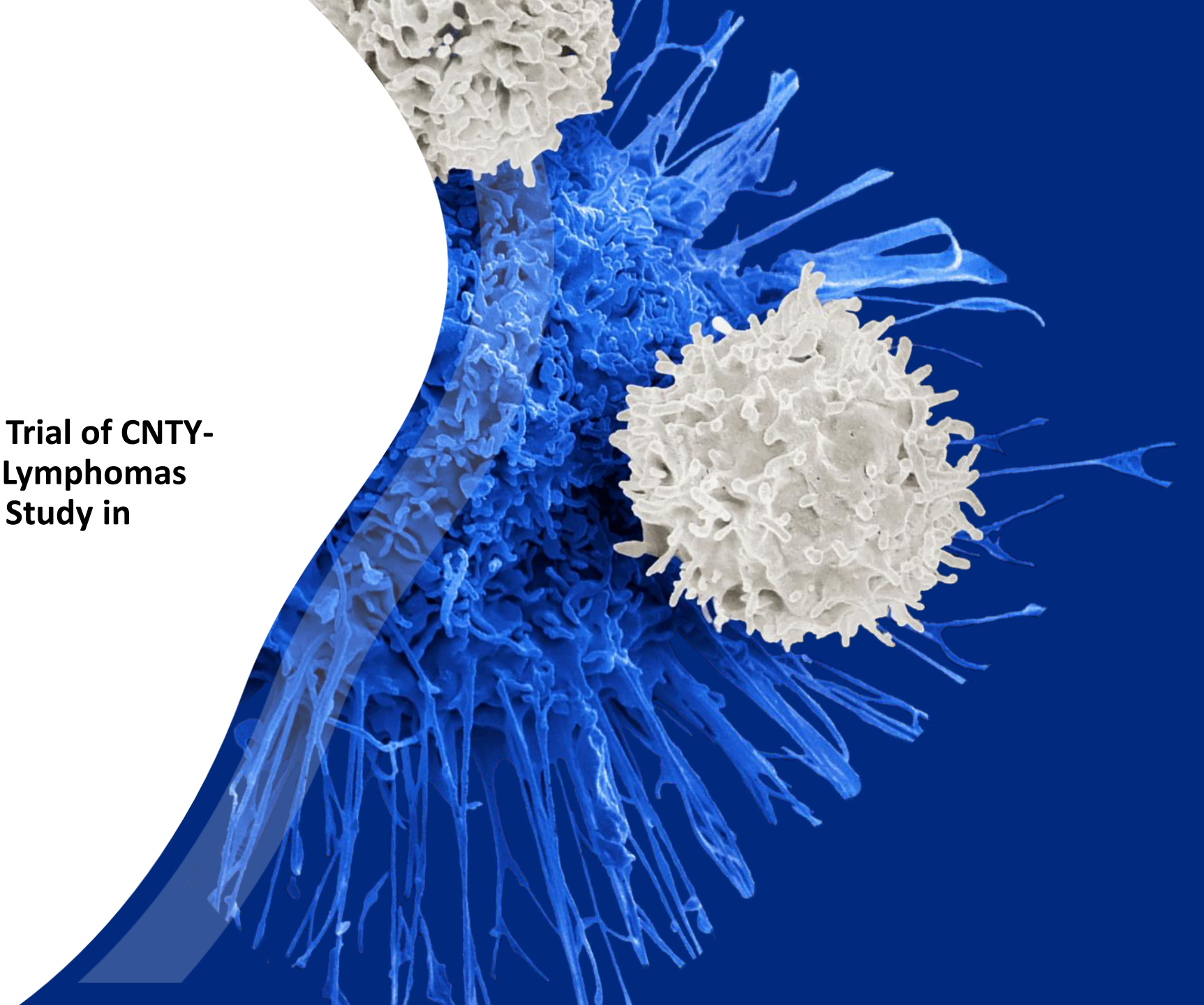
CENTURY THERAPEUTICS

Initial Data from Phase 1 ELiPSE-1 Trial of CNTY-101 in Relapsed/Refractory B-cell Lymphomas and Overview of Planned Phase 1 Study in Systemic Lupus Erythematosus



December 11, 2023

Forward-looking statements

This presentation contains forward-looking statements within the meaning of, and made pursuant to the safe harbour provisions of, The Private Securities Litigation Reform Act of 1995. All statements contained in this document, other than statements of historical facts or statements that relate to present facts or current conditions, including but not limited to, statements regarding possible or assumed future results of operations, business strategies, research and development plans, regulatory activities, market opportunity, competitive position and potential growth opportunities are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “might,” “will,” “should,” “expect,” “plan,” “aim,” “seek,” “anticipate,” “could,” “intend,” “target,” “project,” “contemplate,” “believe,” “estimate,” “predict,” “forecast,” “potential” or “continue” or the negative of these terms or other similar expressions. The forward-looking statements in this presentation are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this presentation and are subject to a number of risks, uncertainties and assumptions, some of which cannot be predicted or quantified and some of which are beyond our control, including, among others: our ability to successfully advance our current and future product candidates through development activities, preclinical studies, and clinical trials; our dependence on the success of our lead product candidate, CNTY-101; the ability of CNTY-101 to be administered as part of a multi-dose strategy and to enable responses without lymphodepletion; uncertainties inherent in the results of preliminary data, pre-clinical studies and earlier-stage clinical trials, which may not be predictive of final results or the results of later-stage clinical trials; the timing of and our ability to initiate and successfully enroll the Phase 1 SLE trial; our ability to obtain FDA clearance of our future IND submissions and commence and complete clinical trials on expected timelines, or at all; our reliance on the maintenance on certain key collaborative relationships for the manufacturing and development of our product candidates; the timing, scope and likelihood of regulatory filings and approvals, including final regulatory approval of our product candidates; the impact of, geopolitical issues and inflation on our business and operations, supply chain and labor force; the performance of third parties in connection with the development of our product candidates, including third parties conducting our future clinical trials as well as third-party suppliers and manufacturers; our ability to successfully commercialize our product candidates and develop sales and marketing capabilities, if our product candidates are approved; and our ability to maintain and successfully enforce adequate intellectual property protection. These and other risks and uncertainties are described more fully in the “Risk Factors” section of our most recent filings with the Securities and Exchange Commission and available at www.sec.gov. You should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur, and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in a dynamic industry and economy. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties that we may face. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

Today's agenda

- **Introduction**
  Brent Pfeiffenberger, Pharm.D., Chief Executive Officer
- **Overview of Foundational Platform Technologies**
  Hy Levitsky, M.D., President of Research and Development
- **Review of Initial ELiPSE-1 Data for CNTY-101**
  Nick Trede, M.D., Ph.D., SVP, Head of Clinical Development
- **CNTY-101 in Systemic Lupus Erythematosus**
  Adrienne Farid, Ph.D., Chief Operations Officer and Head of Early Development
- **Closing**
  Brent Pfeiffenberger, Pharm.D., Chief Executive Officer
- **Also Joining for Q&A**
  Michael Diem, M.D., Chief Financial Officer
  Greg Russotti, Ph.D., Chief Technology and Manufacturing Officer

Century Therapeutics: Building an industry-leading, next-generation allogeneic iPSC-derived cell therapy platform

LIMITLESS POTENTIAL...

Foundational investments in iPSC technology, genetic editing, and manufacturing

PRECISION DESIGN...

Progressing multiple clinical programs in oncology and autoimmune and inflammatory diseases

ENDURING IMPACT...

Well-capitalized into 2026 to enable delivery on key milestones and clinical data

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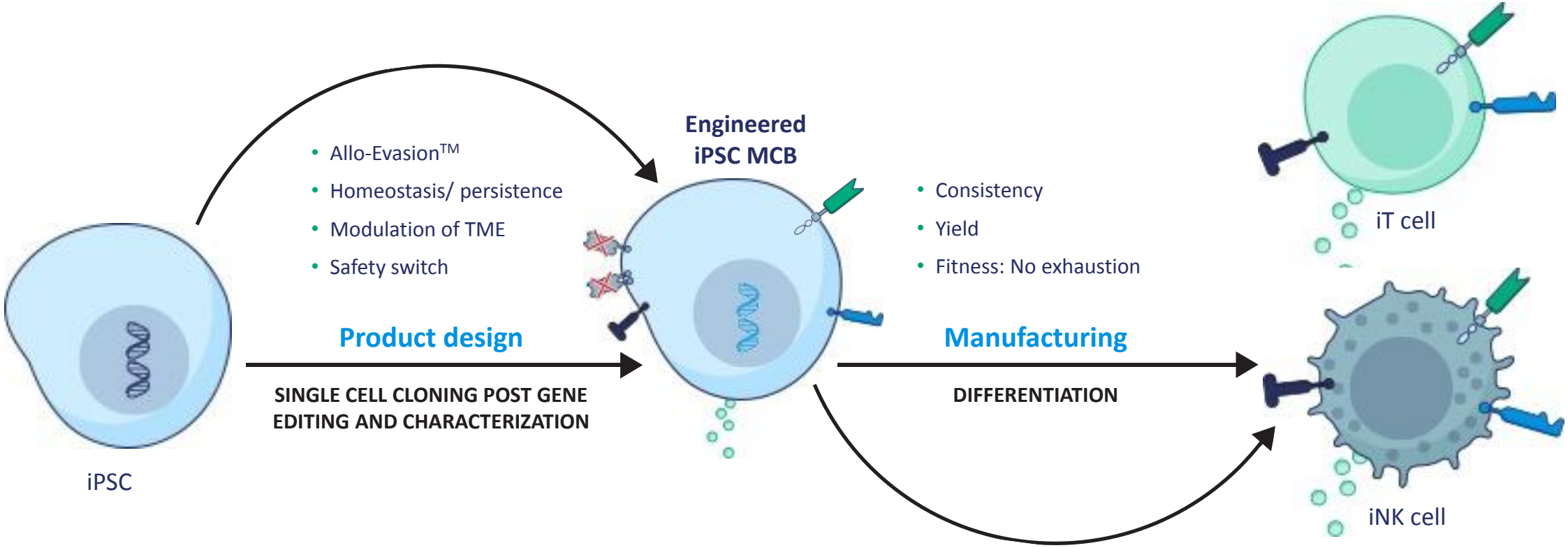
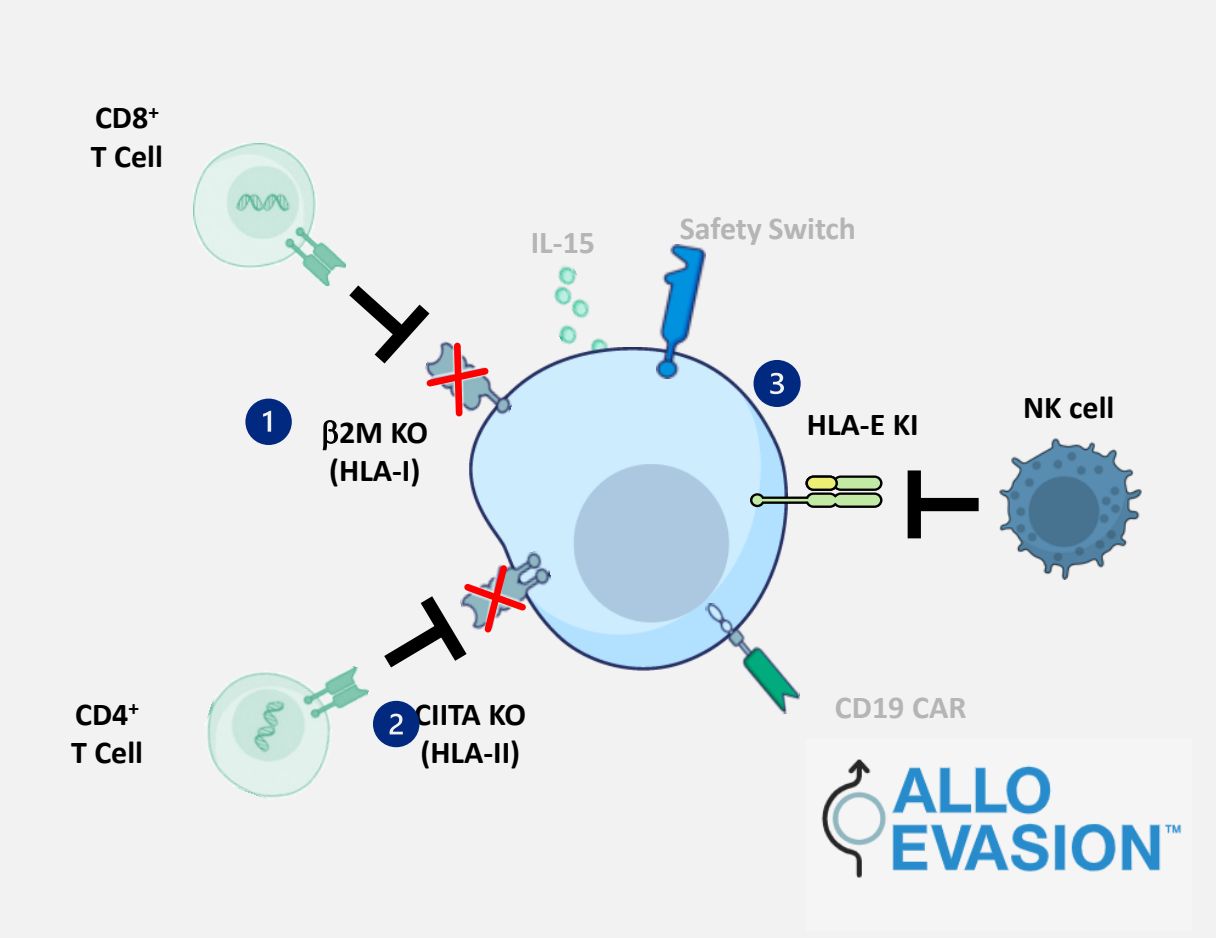
Overview of Foundational Platform Technologies: iPSCs, Allo-Evasion™ and the Creation of CNTY-101

Versatility and unprecedented control: Century's next-generation allogeneic iPSC technology platform



Iterative optimization of product functionality and manufacturability

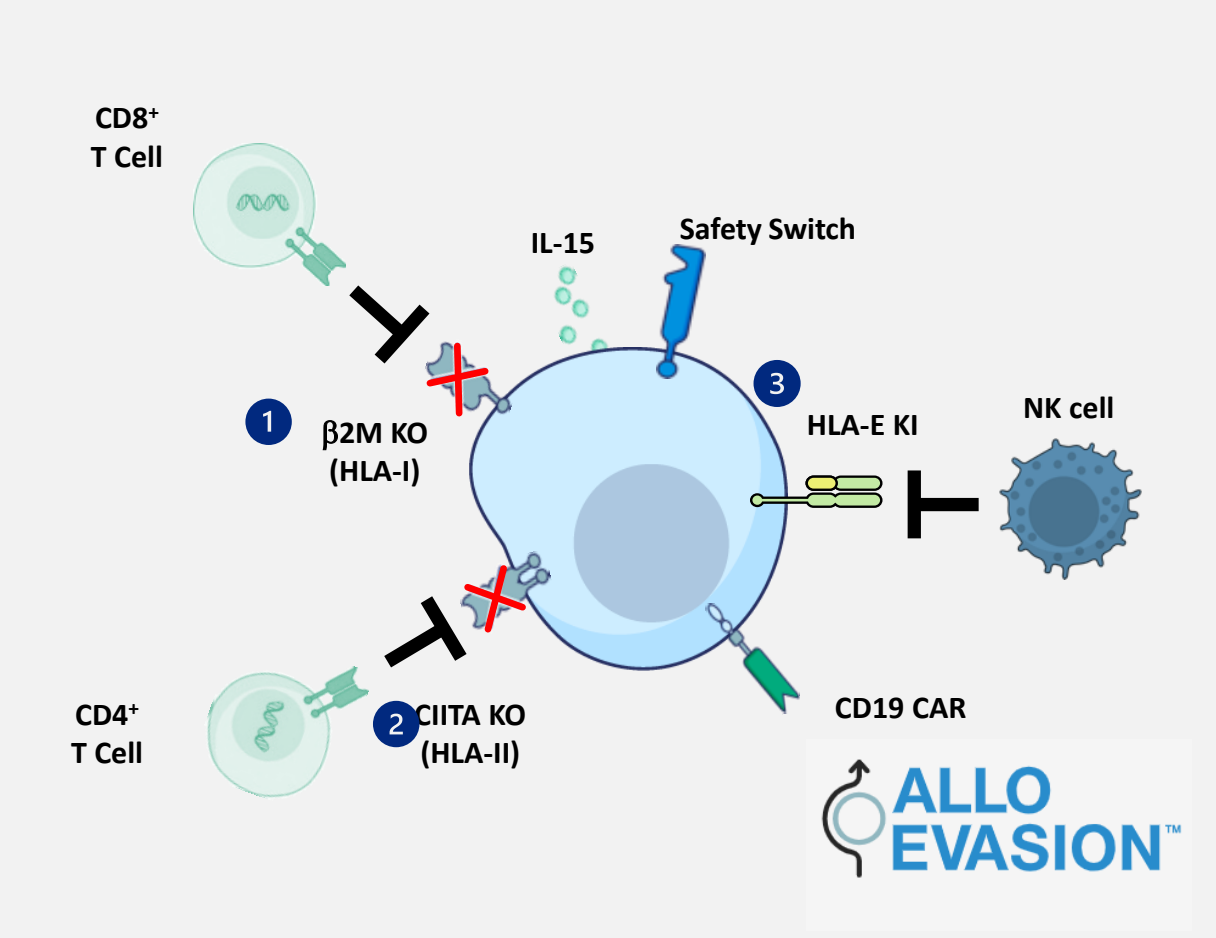
Allo-Evasion™ 1.0 designed to overcome 3 major pathways of host vs. graft rejection



Three core edits disarm host cells from eliminating therapy

1. Deletion of β2M, a protein required to express HLA-1 on the cell surface prevents recognition by CD8 T cells
2. Knock out of CIITA eliminates HLA-II expression to escape elimination by CD4 T cells
3. Knock-in of HLA-E prevents killing by NK cells

CNTY-101: Differentiated next-gen CD19 targeted product

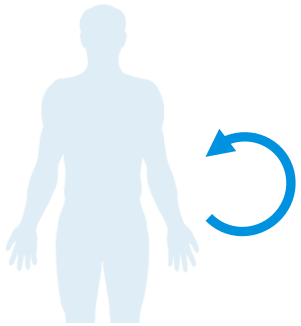


Delivering on our vision to change the cell therapy treatment paradigm

- Goal to improve durability, tolerability and ease of outpatient administration
- Potential to eliminate need for lymphodepletion with subsequent cycles of therapy
- First CD19-targeted agent to test durability benefit of repeat dosing enabled by Allo-Evasion™ edits

CNTY-101: Extending drug exposure in R/R B-cell NHL via repeat dosing and changing the treatment paradigm with Allo-Evasion™

Aim: extending the period of pharmacologic pressure on tumor cells



Unmet need:

- Autologous CD19 CAR-T curative in only a subset of patients
- Autologous CD19 CAR-T access is limited and/or can fail in manufacturing as quality is dependent on patient-derived starting material
- Limited options and poor prognosis for patients who fail autologous CAR-T

Potential solution from Century's platform:

- Off-the-shelf product offers immediate access and consistency
- Multiple doses to increase pharmacological pressure to increase durability
- Host rejection addressed by Allo-Evasion™ edits

R/R: relapsed or refractory, NHL: non-Hodgkin lymphoma, CAR-T: chimeric antigen receptor T cell therapy

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Review of Initial ELiPSE-1 Data for CNTY-101

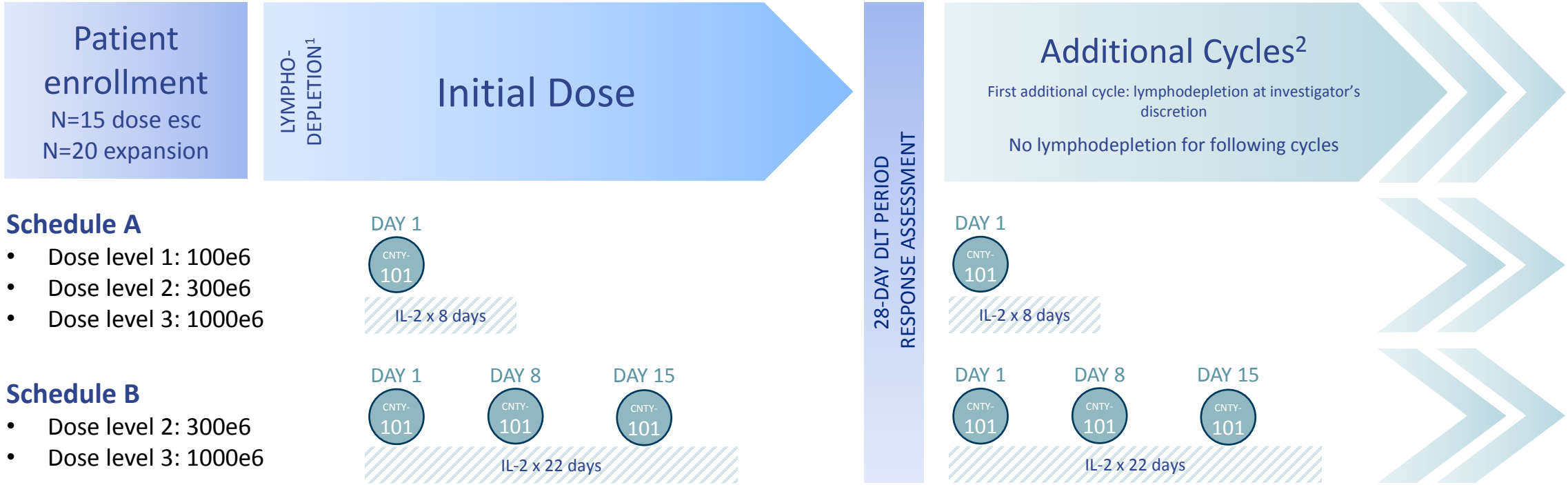
CNTY-101: ELiPSE-1 (NCT05336409) Phase 1 BOIN design

Inclusion:

- R/R CD19+ NHL
- Aggressive B cell lymphoma (DLBCL, tFL, high-grade B cell lymphoma, PMBCL, MCL, FL3B)
- High-risk indolent lymphoma

Endpoints:

- Primary: MTD based on DLTs; RP2R
- Key Secondary: Safety, tolerability, Efficacy (ORR, CRR, DoR), PK
- Exploratory: feasibility of additional cycles, Allo-Evasion™



[1] *Standard lymphodepletion regimen: fludarabine (30 mg/m2/d) and cyclophosphamide IV (300 mg/m2/d) for 3 days*
[2] *Subjects who are assessed as stable disease or better may receive additional cycles of CNTY-101*
BOIN: Bayesian Optimal Interval, DLBCL: diffuse large B cell lymphoma, tFL: transformed follicular lymphoma, PMBCL: primary mediastinal B-cell lymphoma, MCL: mantle cell lymphoma, FL3B: follicular lymphoma grade 3B, DLT: dose-limiting toxicity, RP2R: recommended Phase 2 regimen, ORR: objective response rate, CRR: complete response rate, DoR: duration of response, PK: pharmacokinetics, IL-2: interleukin-2

ELiPSE-1 initial data: Key takeaways

- Heavily pretreated and refractory patient population treated in first-in-human dose escalation trial
- Favorable safety profile; can be delivered in an outpatient setting
- Encouraging early efficacy signals at lowest dose levels
    - 2 patients achieving CR, including 1 patient with 6-month durable CR
- No evidence of allo-rejection
- *Initial data for CNTY-101 supports the potential for Allo-Evasion™ to enable a multi-dosing regimen without the need for continued lymphodepletion*

CR: Complete response

ELiPSE-1 enrolled heavily pretreated patients

BASELINE CHARACTERISTICS	
Patients treated	7
Median age (range)	68 (60-72)
PRIOR THERAPY	
Median # of prior therapies (range)	4 (2-6)
Prior CD-19-targeted CAR T-cell therapy	3[a] (43%)
DISEASE CHARACTERISTICS	
Aggressive histology	5 (71%)
Refractory to last line of therapy	6 (86%)
Elevated LDH at screening	5 (71%)
Stage 4 (Dx | Screening)	5 (71%) | 7 (100%)
Median baseline target lesion SPD (mm^2) (range)	2044 (641-29716)

Data cutoff date of November 13, 2023; represents data verified post data cut
a. One additional subject had CAR T-cell manufacturing failure
LDH: Lactate dehydrogenase, SPD: sum of the products of diameters

ELiPSE-1: Overview of patients

COHORT	PATIENT	DISEASE HISTORY				TREATMENT	
		Indication	Prior Lines Therapy	Prior CAR T?	Relapse or Refractory to Last Line	Dose	Cycles Completed
DOSE LEVEL 1	**1**	iFL	4	N	Refractory	100 x 10^6	7
	2	DLBCL/tFL	4	Y	Refractory	100 x 10^6	1
	3	DLBCL	2	N[a]	Refractory	100 x 10^6	1
	4	DLBCL/tMZL	4	N	Refractory	100 x 10^6	1
DOSE LEVEL 2	**5**	MZL	4	N	Refractory	300 x 10^6	2
	6	DLBCL	4	Y	Refractory	300 x 10^6	1
	7	DLBCL/tFL	6	Y	Relapsed	300 x 10^6	1*

Data cutoff date of November 13, 2023; represents data verified post data cut

[a] *CAR T manufacturing failure*

CRS: cytokine release syndrome, ICANS: immune effector cell–associated neurotoxicity syndrome, AE: adverse event, SAE: serious adverse event

ELiPSE-1: Favorable initial safety profile

COHORT	PATIENT	DISEASE HISTORY				TREATMENT		SAFETY			
		Indication	Prior Lines Therapy	Prior CAR T?	Relapse or Refractory to Last Line	Dose	Cycles Completed	DLTs	CRS (Grade)	ICANS	CNTY-101 Related Gr3+ AE/SAE
DOSE LEVEL 1	**1**	iFL	4	N	Refractory	100 x 10^6	7	N	N	N	N
	2	DLBCL/ tFL	4	Y	Refractory	100 x 10^6	1	N	N	N	N
	3	DLBCL	2	N[a]	Refractory	100 x 10^6	1	N	N	N	N
	4	DLBCL/ tMZL	4	N	Refractory	100 x 10^6	1	N	Y (1)	N	Y
DOSE LEVEL 2	**5**	MZL	4	N	Refractory	300 x 10^6	2	N	Y (2)	N	Y
	6	DLBCL	4	Y	Refractory	300 x 10^6	1	N	N	N	N
	7	DLBCL/ tFL	6	Y	Relapsed	300 x 10^6	1*	N*	N*	N*	N*

**Data cutoff date of November 13, 2023; represents data verified post data cut*

a. CAR T manufacturing failure

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ELiPSE-1: Early evidence of anti-lymphoma activity at lowest dose levels

COHORT	PATIENT	DISEASE HISTORY				TREATMENT		SAFETY				RESPONSE
		Indication	Prior Lines Therapy	Prior CAR T?	Relapse or Refractory to Last Line	Dose	Cycles Completed	DLTs	CRS	ICANS	CNTY-101 Related Gr3+ AE/SAE	Best Overall Response
DOSE LEVEL 1	**1**	iFL	4	N	Refractory	100×10^6	7	N	N	N	N	CR
	2	DLBCL/tFL	4	Y	Refractory	100×10^6	1	N	N	N	N	PD
	3	DLBCL	2	N[a]	Refractory	100×10^6	1	N	N	N	N	PD
	4	DLBCL/tMZL	4	N	Refractory	100×10^6	1	N	Y	N	Y	PD
DOSE LEVEL 2	**5**	MZL	4	N	Refractory	300×10^6	2	N	Y	N	Y	PR
	6	DLBCL	4	Y	Refractory	300×10^6	1	N	N	N	N	PD
	7	DLBCL/tFL	6	Y	Relapsed	300×10^6	1*	N*	N*	N*	N*	CR*

**Data cutoff date of November 13, 2023; represents data verified post data cut*

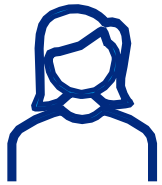
[a]. CAR T manufacturing failure

ASH case study: Dose level 1 patient with 6-month durable complete response^

Multiple Doses of CNTY-101, an iPSC-Derived Allogeneic CD19 Targeting CAR-NK Product, are Safe and Result in Tumor Microenvironment Changes Associated with Response: A Case Study

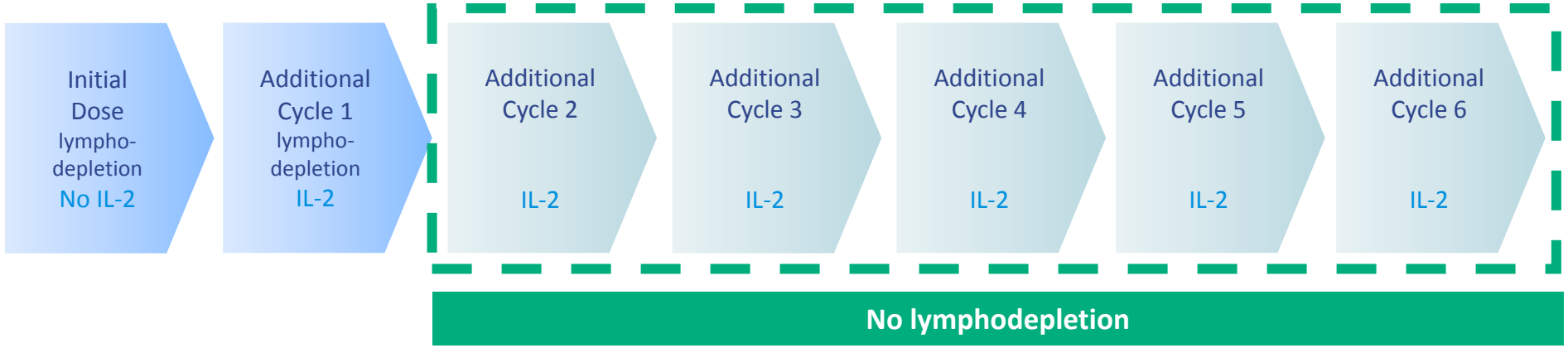
Indu Ramachandran[1], Sarah Rothman[1], Mariano Clausi[1], Kile McFadden[1], Brenda Salantes[1], Gloria Jih[1], Thomas Brigman[1], Sam Kelly[1], Matthew S. Hall[1], Stephanie Yee[1], Iphigenia Koumenis[1], Poulomee Das[1], Jordan Briggs[2], Tori Braun[2], Ying Yuan[3], Elizabeth Devlin[1], Adrienne Farid[1], Nikolaus Trede[1], Tamara K. Moyo[5], Tahir Latif[4], Krish Patel[2]

[1]Century Therapeutics, Philadelphia, PA [2]Swedish Cancer Institute, Seattle, WA [3]MD Anderson Cancer Center, Houston, TX [4]Atrium Health Levine Cancer Institute, Charlotte, NC [5]University of Cincinnati Medical Center, Cincinnati, OH



Sex/Age: Female/63
Tumor Subtype: Follicular Lymphoma
Dose/Schedule: 100e6 cells x 1 per cycle (Dose Level 1; Schedule A)

Prior Therapy:
- 4 prior lines of therapy including anti-CD20, bispecific, and investigational therapy
- High-risk R/R - Relapsed within 12 months of starting R-CHOP



IL-2: subcutaneous 3e6 IU for 8 days, except for initial cycle

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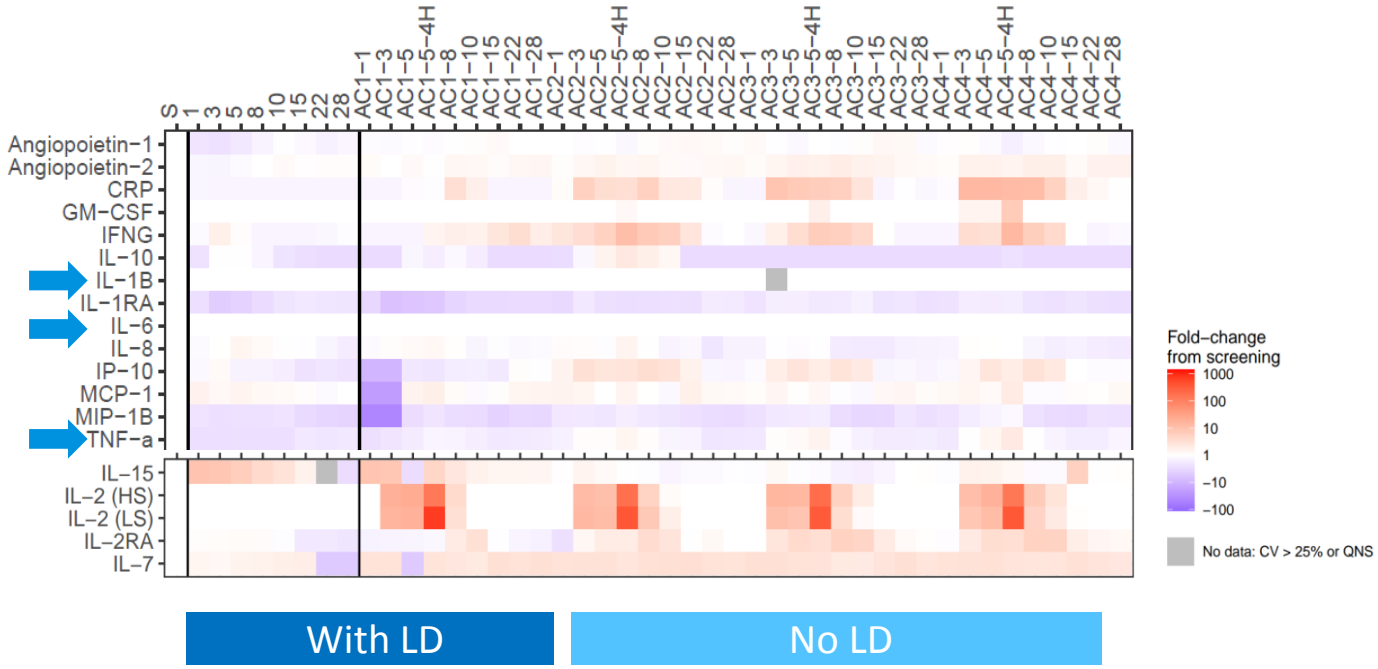
^Patient subsequently progressed
Ramachandran, et al. 2023 ASH Annual Conference

ASH case study: Favorable initial safety profile

Safety profile in first 7 subjects:

- No DLTs, no CRS, no ICANS
- No AEs related to CNTY-101
- Factors associated with CRS and neurotoxicity were not significantly elevated
- Elevation in peripheral IL-2 is observed, coinciding with IL-2 administration



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AC: Additional Cycle
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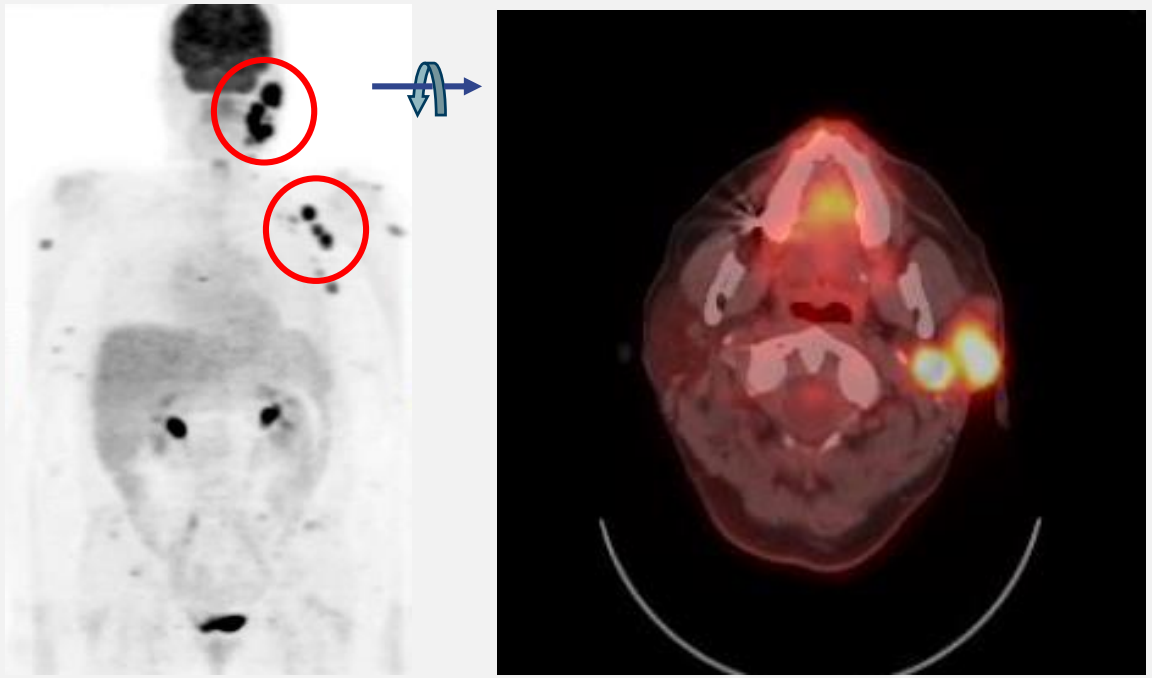
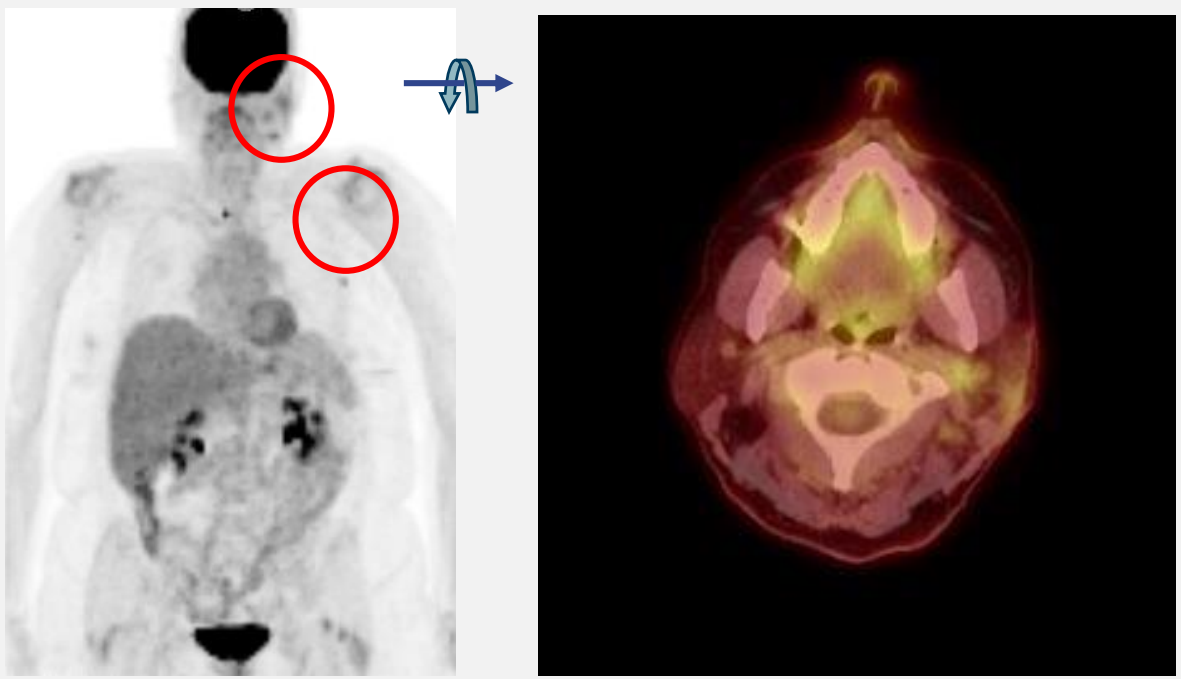
ASH case study: Early evidence of anti-lymphoma activity with durable 6-month complete response^



Baseline



Post-initial dose (Day 28)

^Patient subsequently progressed

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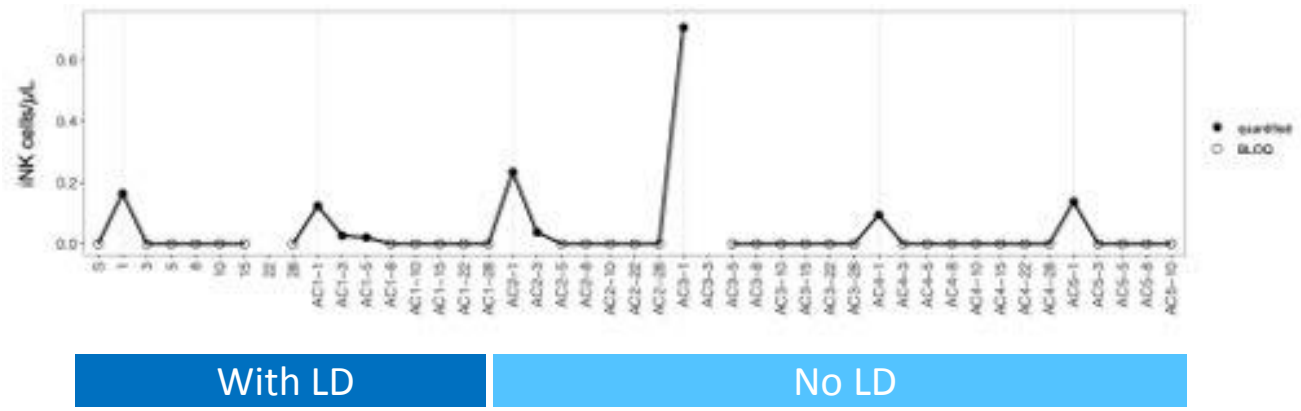
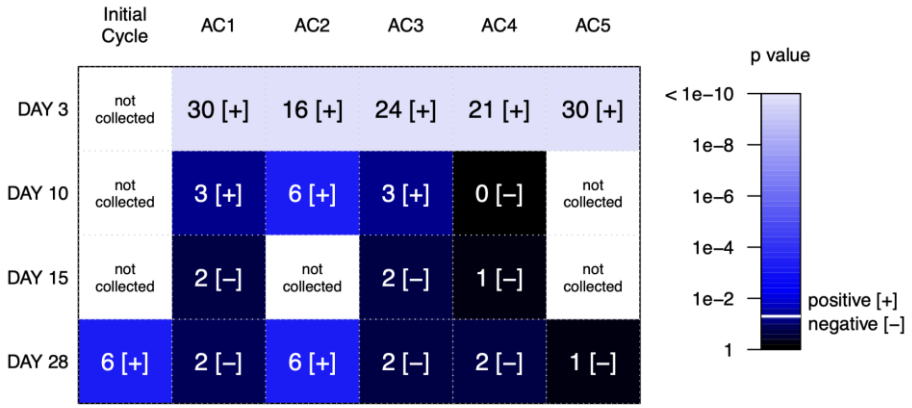
ASH case study: CNTY-101 persists outside of circulation and humoral immunogenicity is not detected

PK shows CNTY-101 cells traffic out of circulation shortly after infusion; consistent levels at 1 hour post-infusion are observed with and without LD

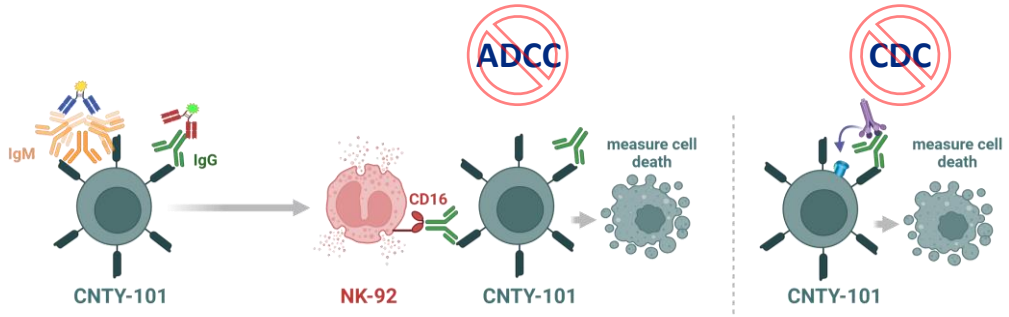


CNTY-101 cells persist in tissues for at least three days as measured by cfDNA; consistent CNTY-101 cfDNA levels are observed with and without LD at Day 3



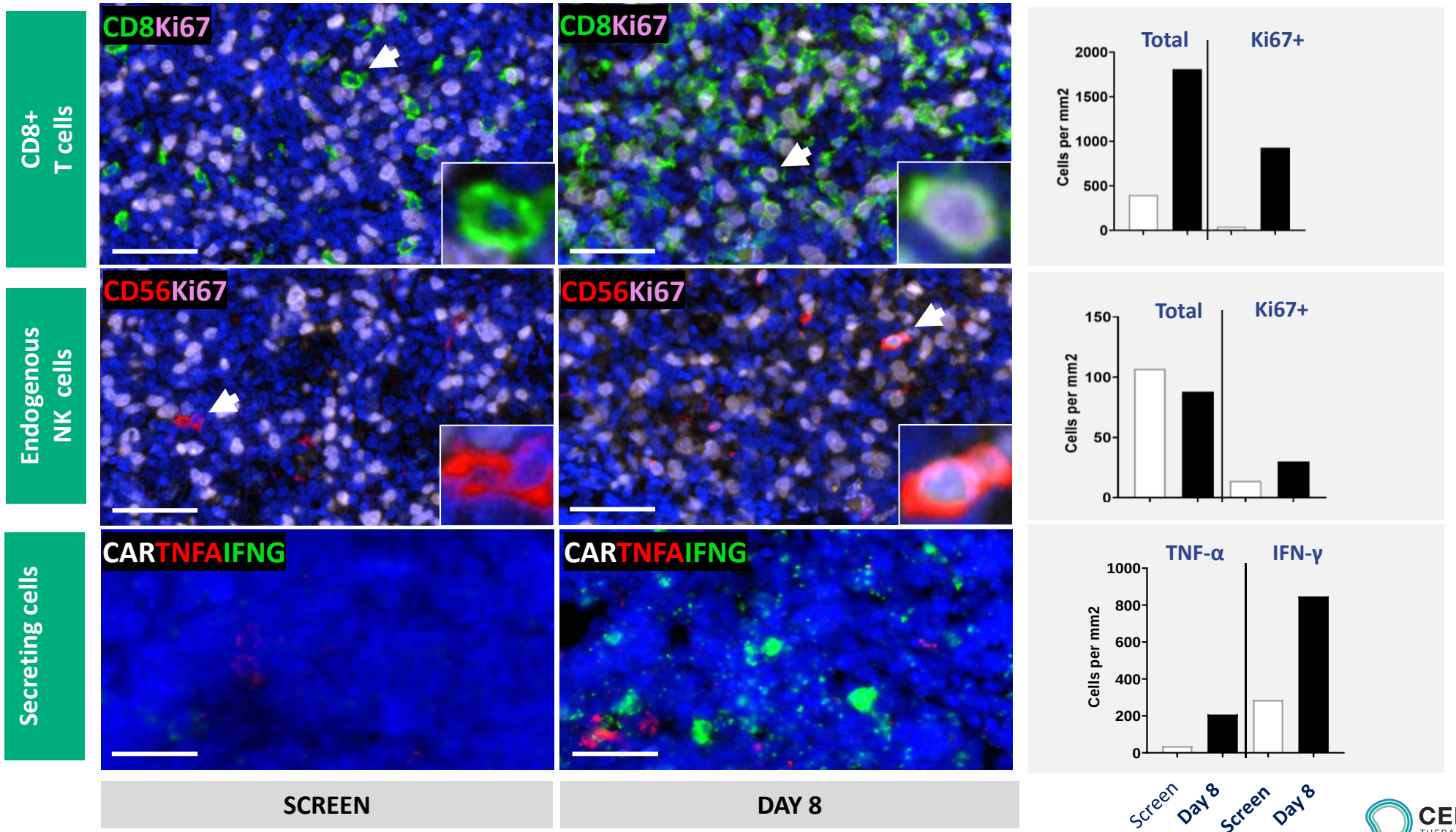
Detectable signal [+] was determined to be significantly above negative controls using two sample Poisson test, $p < 0.05$; transgene copies detected in 1 mL of plasma is indicated

Anti-drug antibodies and functional humoral immune response against CNTY-101 are not detected (five cycles evaluated)



cfDNA: cell-free DNA, LD: lymphodepletion
Ramachandran, et al. 2023 ASH Annual Conference

ASH case study: Intra-tumoral adaptive immune response observed following initial dose without IL-2



Summary of ELiPSE-1 data

- Heavily pretreated and refractory patient population treated in first-in-human dose escalation trial
- Favorable safety profile; can be delivered in an outpatient setting
- Encouraging early efficacy signals at lowest dose levels
    - 2 patients achieving CR, including 1 patient with 6-month durable CR
- No evidence of allo-rejection
- Initial data for CNTY-101 supports the potential for Allo-Evasion™ to enable a multi-dosing regimen without the need for continued lymphodepletion
- *We believe CNTY-101's manageable initial safety profile, initial response data, and PK/PD supports advancing to higher doses to potentially deepen and prolong clinical response*

Cohorts of 1 billion cells/1 monthly dose and 300 million/weekly x 3 doses are open;
Additional clinical data expected in mid-2024

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CNTY-101 in Systemic Lupus Erythematosus

Opportunity in systemic lupus erythematosus to improve long-term disease control

Estimated global prevalence of 3.4 million patients[1]

- Abnormal B cell function and autoantibody production are central to disease pathogenesis
- Major causes of morbidity and mortality involve multiple systems
  - Renal, CNS and cardiovascular involvement are major causes of morbidity and mortality

Despite approved treatments, significant unmet need remains

- Chronic treatment with broad-acting anti-inflammatory and immunosuppressives
- Current treatments fail to significantly impact morbidity in the moderate to severe population
- Treatment toxicity and disease flares remain common

Autologous anti-CD19 CAR T cell therapies have established a promising efficacy proof of concept in SLE[2]

- Challenges remain due to potential exposure to CRS and ICANS, product availability, and long-term risks including B-cell aplasia

1. *Tian J, et al. Ann Rheum Dis 2023;82:351–356 http://dx.doi.org/10.1136/ard-2022-223035*
2. *Mackensen A, et al.. Nature Medicine 2022 28:10 (2124-2132) https://doi.org/10.1038/s41591-022-02017-5*

CNS: central nervous system, SLE: systemic lupus erythematosus

CNTY-101 aims to eliminate pathogenic B-cells in SLE leading to remission via repeat dosing facilitated by Allo-Evasion™

Aim: Safely provide immune reset with an immediately available therapy

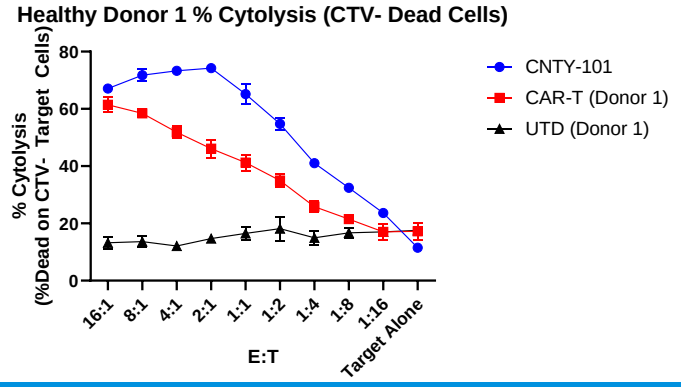
CNTY-101 has the potential to improve on current SLE treatments

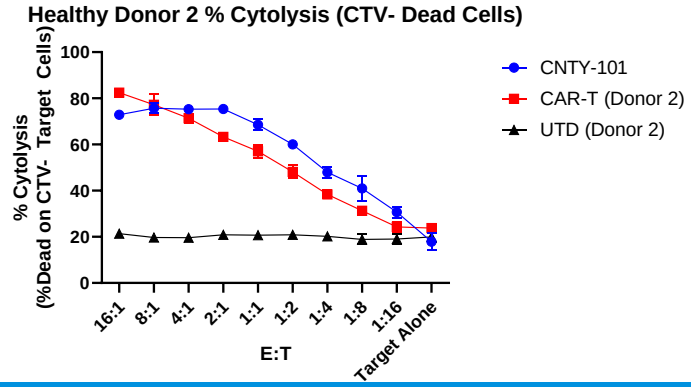
- Anti-CD19 CAR-iNK cells derived from an HDR precision-edited iPSC clone, including IL-15 cytokine support, a safety switch, and Allo-Evasion™ edits
- Clonal, consistent, well-characterized product
- Available off-the-shelf, without requiring patient apheresis, no manufacturing wait time
- Favorable initial safety profile, allowing for outpatient treatment
- Ability to be redosed without lymphodepletion, while avoiding allo-rejection based on initial data
- Potential to enable B cell depletion and a reduction in auto-antibodies without prolonged B-cell aplasia

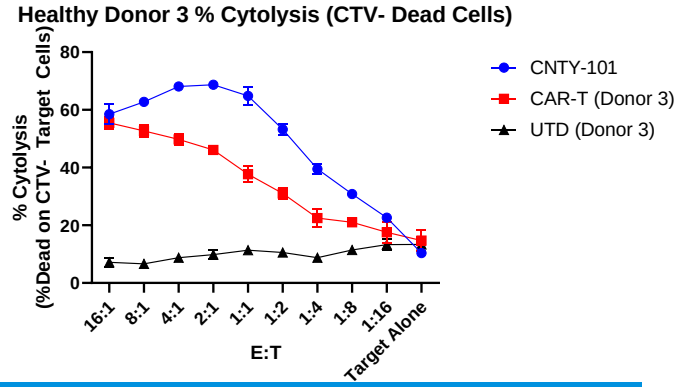
HDR: homology-directed repair

CNTY-101 initial clinical data comparable to primary CAR-T cells at B-cell killing at 24 hours

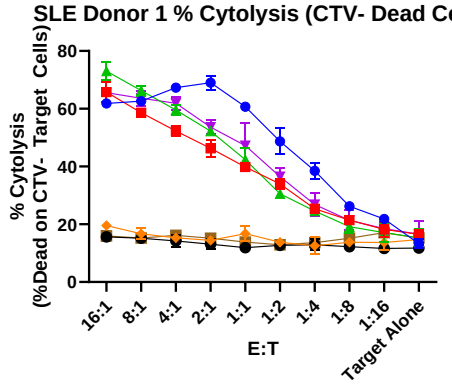
CNTY-101 & Autologous CAR-T on B Cells Isolated from Healthy Donors

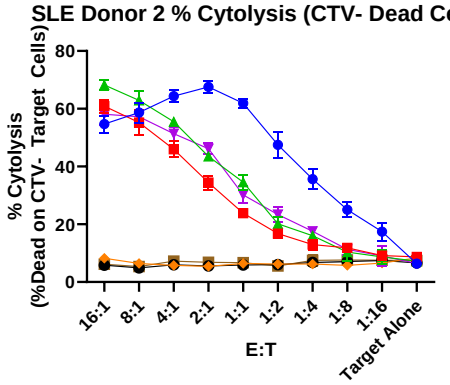


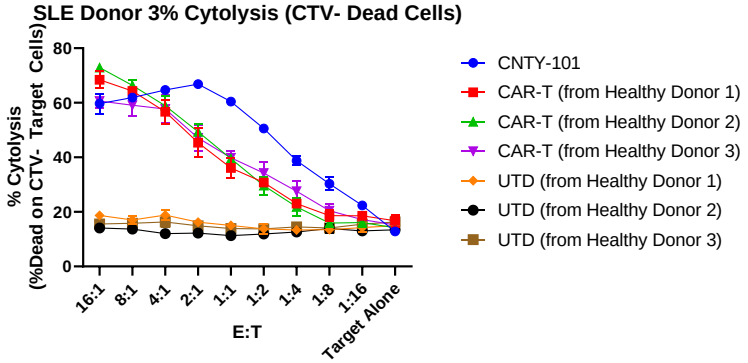




CNTY-101 & CAR-Ts from Healthy Donors on B Cells Isolated from SLE Patients







CNTY-101 cells show similar potency to primary CAR-T cells in preclinical comparison

Isolated B cells or CD19+ target cells were co-cultured with CNTY-101 or primary CAR-T at several E:Ts in 96-well U bottom plates in NKCM with assay harvested at 24h.

Assay plates were harvested and stained for Fixable Live/Dead. Cells were fixed and run on cytometer to determine Target+Dead Cell populations.

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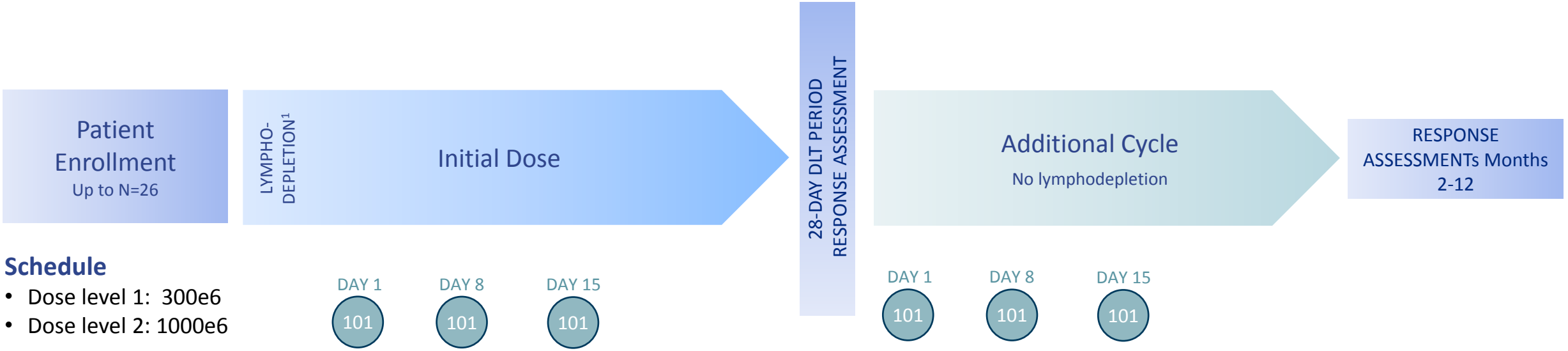
CNTY-101: Systemic lupus erythematosus Phase 1 study

Inclusion:

- Patients with moderate to severe SLE after 2+ standard immunosuppressive therapies

Endpoints:

- Key endpoints: safety, SLE manifestations per SLEDAI, LLDAS, DORIS
- Translational Endpoints: B-cell depletion, auto-antibody decline



Schedule

- Dose level 1: 300e6
- Dose level 2: 1000e6

Trial planned to initiate in the first half of 2024; initial data expected by year-end 2024

[1] *Standard lymphodepletion regimen: fludarabine (30 mg/m2/d) and cyclophosphamide IV (300 mg/m2/d) for 3 days*

Century Therapeutics pipeline of iPSC-derived allogeneic NK and T cell therapies

Product	iPSC Platform	Targets	Indications	Discovery	Preclinical	Clinical P1	Clinical P2	Clinical P3	Collaborator
CNTY-101	iNK	CD19	B-Cell Malignancies						
			Systemic Lupus Erythematosus						
CNTY-102	iT	CD19 + CD22	B-Cell Malignancies						
CNTY-107	iT	Nectin-4	Solid Tumors						
Programs in Collaboration									
CNTY-104	iNK/iT	Multi-specific	Acute Myeloid Leukemia						Bristol Myers Squibb
CNTY-106	iNK/iT	Multi-specific	Multiple Myeloma						Bristol Myers Squibb
Research Programs									
Discovery	iNK/iT	TBD	Hematological / Solid Tumors						

Solid Tumors Hematologic Tumors Autoimmune and Inflammatory Diseases

CENTURY THERAPEUTICS

CENTURY THERAPEUTICS

Closing

Century Therapeutics: Building an industry-leading, next-generation allogeneic iPSC-derived cell therapy platform

LIMITLESS POTENTIAL...

Foundational investments in iPSC technology, genetic editing, and manufacturing

PRECISION DESIGN...

Progressing multiple clinical programs in oncology and autoimmune and inflammatory diseases

ENDURING IMPACT...

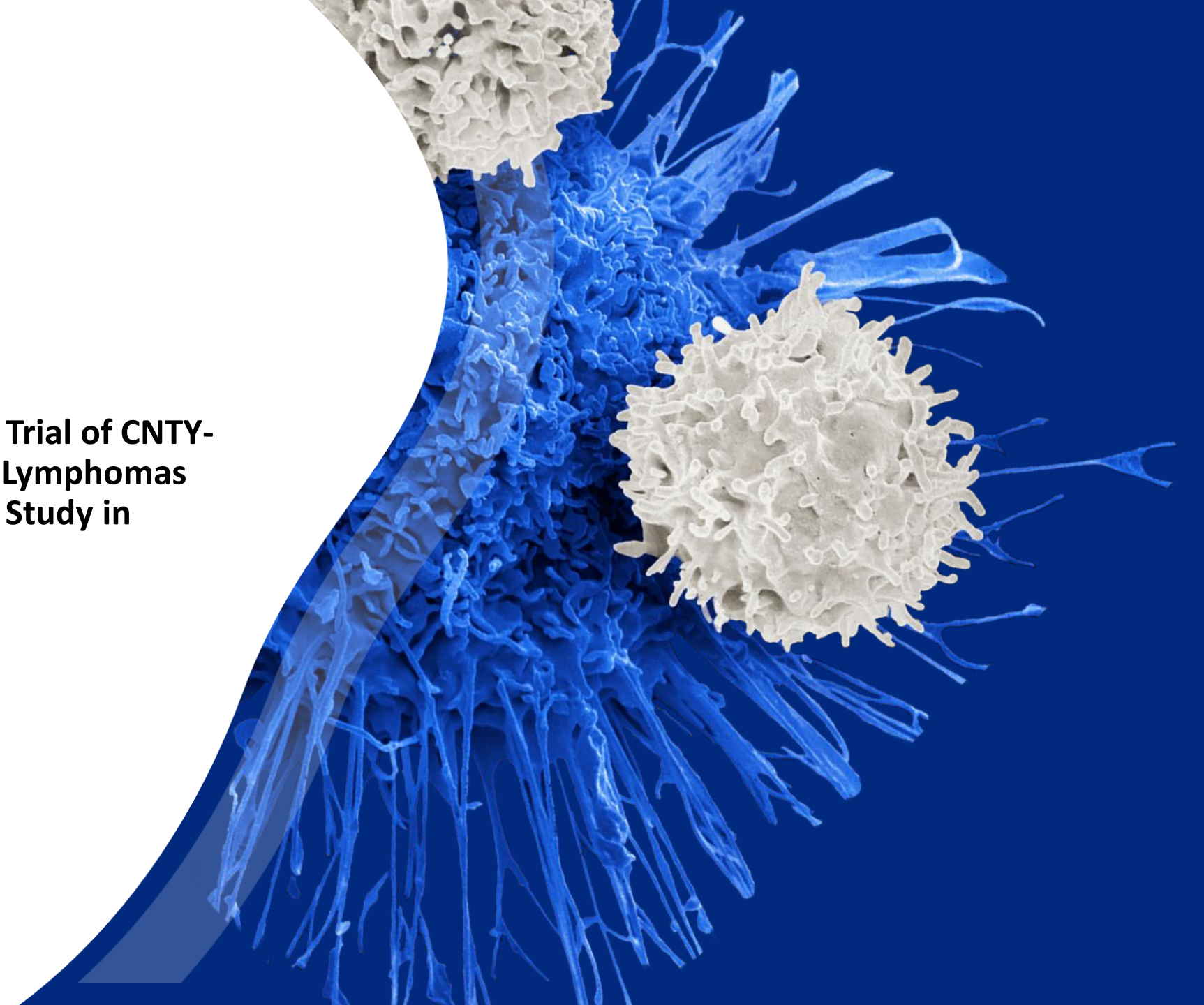
Well-capitalized into 2026 to enable delivery on key milestones and clinical data

Q&A participants

- *Brent Pfeiffenberger, Pharm.D., Chief Executive Officer*
- *Hy Levitsky, M.D., President of Research and Development*
- *Nick Trede, M.D., Ph.D., SVP, Head of Clinical Development*
- *Adrienne Farid, Ph.D., Chief Operations Officer and Head of Early Development*
- *Michael Diem, M.D., Chief Financial Officer*
- *Greg Russotti, Ph.D., Chief Technology and Manufacturing Officer*

CENTURY THERAPEUTICS

Initial Data from Phase 1 ELiPSE-1 Trial of CNTY-101 in Relapsed/Refractory B-cell Lymphomas and Overview of Planned Phase 1 Study in Systemic Lupus Erythematosus



December 11, 2023