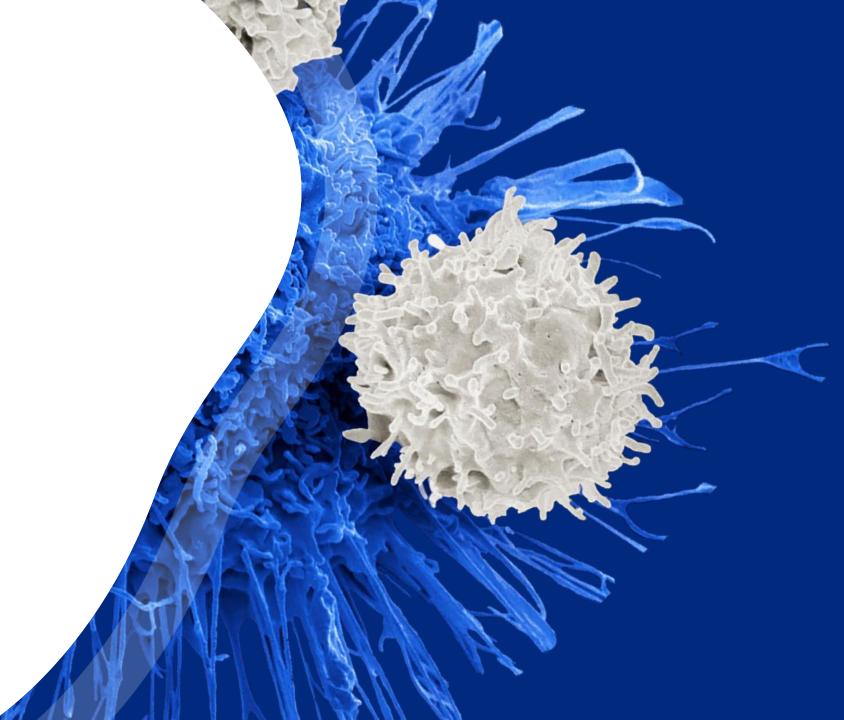


Corporate Overview

April 2024



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 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: our ability to successfully integrate operations with Clade Therapeutics, 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 forwardlooking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.



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

LIMITLESS POTENTIAL...

PRECISION DESIGN...

ENDURING IMPACT...

Foundational investments in iPSC technology, genetic editing, protein engineering, and manufacturing

Progressing differentiated clinical programs based on Allo-Evasion[™] technology in oncology and autoimmune and inflammatory diseases

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





Overview of Foundational Platform Technologies

Century's singular focus: To deliver best-in-class iPSC-derived cell therapies

Century platform enables the incorporation of critical features we believe can <u>only be</u> realized via iPSC-derived cell therapies

Infinite replicative capacity at the iPSC stage enables potentially unlimited genomic editing via CRISPR HDR Single cell cloning of engineered iPSC allows selection of a **fully characterized clone** for master cell bank, ensuring safety and functional reproducibility of the final drug product

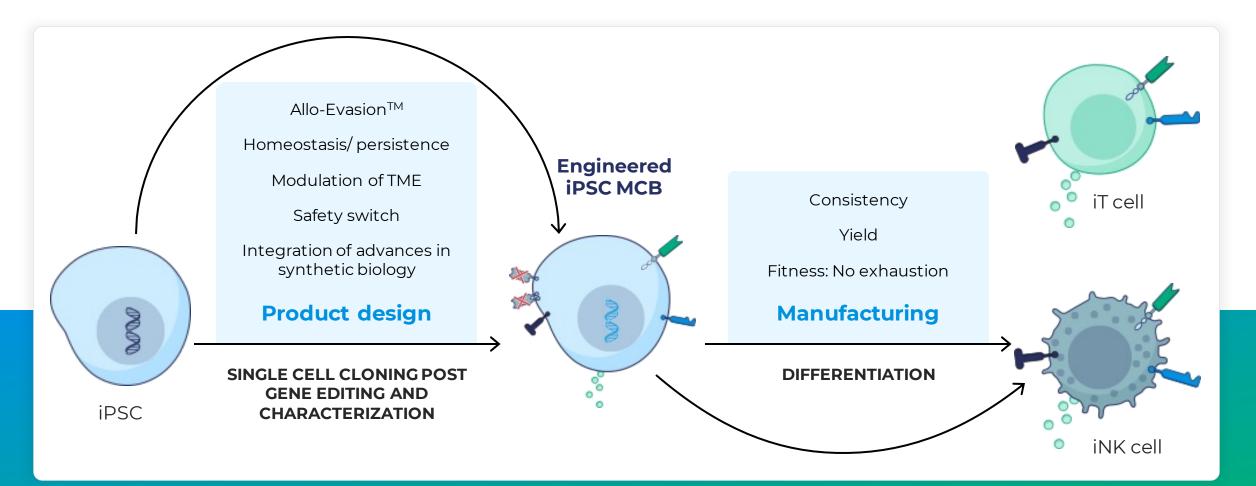
Platform capable of fully *leveraging multiple advances in synthetic biology into a single product*

Cell expansion during multiple stages of differentiation yields large cell harvests, decreasing risk of cell exhaustion, reducing COGs and providing robust drug inventory that is potentially infinitely replenishable

Production from a master cell bank – derived from a single donor – enables **larger batch sizes** and **lower cost of goods than donor-derived or autologous** Differentiation conditions developed for generating multiple immune effector cells, including NK cells, CD4+T cells (Th and Treg), CD8+T cells, monocytes/ macrophages



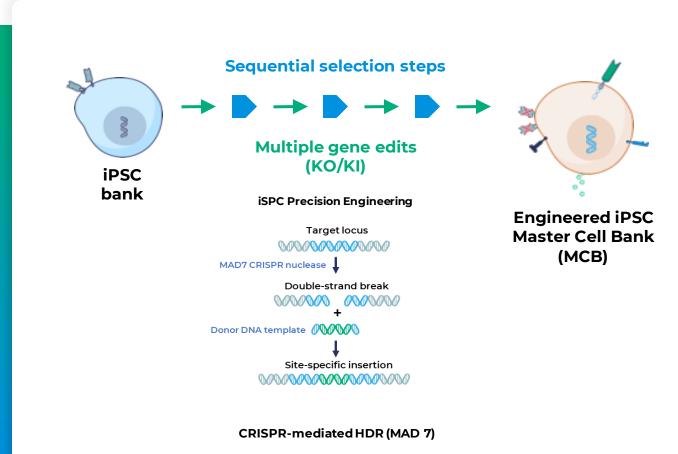
Century's next-generation allogeneic iPSC technology platform: Versatility and unprecedented control



Rapid Integration of major advances in product functionality and manufacturability



Precision CRISPR MAD7 mediated sequential gene editing of iPSC cells generates uniform product candidates



Advantages of Century's Platform

Precise CRISPR mediated homology directed repair reduces off-target integration

Stepwise and efficient gene editing **avoids risky multiplex modification** and structural variants

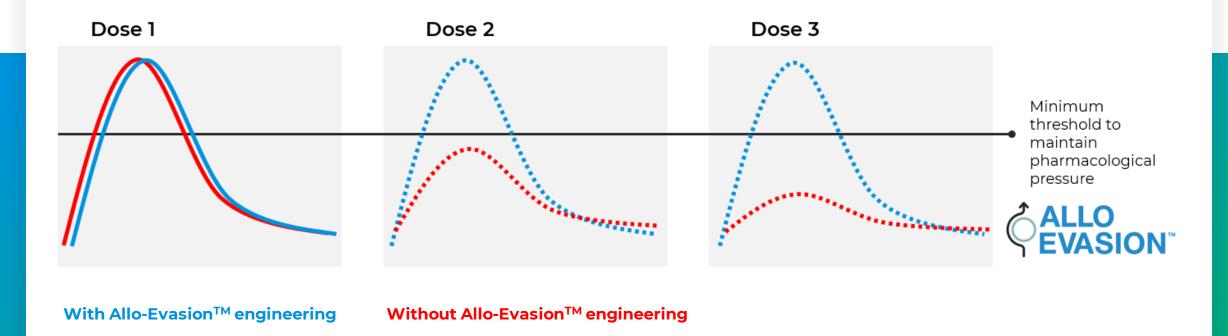
Quality control through generation of homogenous MCB establishes genomic product **integrity**

Manufacturing begins at the MCB, confirmed to be **free from genetic aberrations**



Potential to drive durable responses with engineering to resist immune rejection

Allo-Evasion[™] edits + repeat dosing = potential greater durability

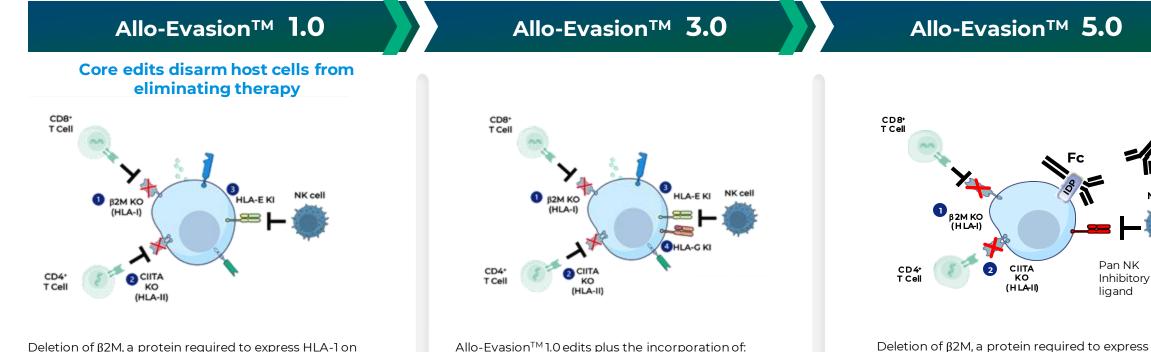


Next-wave of allogeneic cell therapies must solve for challenge of rejection



Advancing our leadership in Allo-EvasionTM technology Continuous improvement in holistic immune protection designed to

overcome major pathways of host vs. graft rejection



Deletion of $\beta 2M$, a protein required to express HLA-1 on the cell surface prevents recognition by CD8T cells

Knockout of CIITA eliminates HLA-II expression to escape elimination by CD4 T cells

Knock-in of HLA-E prevents killing by NK cells

Knock-in of HLA-G improves protection against killing by NK cells



Deletion of β 2M, a protein required to express HLA-1 on the cell surface prevents recognition by CD8T cells

Knock out of CIITA eliminates HLA-II expression to escape elimination by CD4 T cells

Pan-NK inhibitory ligand to provide broader protection against killing by NK cells

IgG degrading protease designed to protect against humoral immunity





NKcell

Foundational investments in iPSC manufacturing



Established	in-house	manufacturing

- Century 53,000 ft² GMP facility
- Designed to produce multiple immune cell types
- Accelerates learnings and enables faster product iteration
- Two sites (FCDI GMP manufacturing, Century in-house manufacturing) provide optionality and maximizes flexibility

- **Developing fit-for-purpose products**
- Increased process and product consistency
- Scalable platforms and optimized processes to maximize yield, reduce COGs, and meet demand
- Increases in cell fitness, as cells do not undergo excessive expansion cycles which often result in cell exhaustion
- Homogeneity of the manufacturing process produces a product candidate that can be readily characterized





Pipeline

Newly expanded and diversified pipeline

Product candidates spanning cell types and targets in cancer and autoimmune and inflammatory diseases

							Clinical		
Product	iPSC Platform	Targets	Indications	Research	IND-Enabling	P1	P2	P3	Collaborator / Origin
Autoimmune ar	nd Inflammatory Dis	eases							
CNTY-101 iNK		CD19	Systemic Lupus Erythematosus	CALiPSO-1		IND cleared			
			Autoimmune Diseases						
CNTY-108	iNK/γδ iT	CD19	Autoimmune Diseases						
CLDE-308	αβ iT	CD19	Autoimmune Diseases						
CLDE-361	αβ ίΤ	ВСМА	Myasthenia Gravis						
lematologic a	nd Solid Tumors								
CNTY-101	iNK	CD19	B-Cell Malignancies	E	ELiPSE-1				
CNTY-102	iNK/γδ iT	CD19 + CD22	B-Cell Malignancies						
CLDE-308	αβ iT	CD19	B-Cell Malignancies						
CNTY-104	iNK/iT	Multi-specific	AML						t ^{ill} ı Bristol Myers Squib
CNTY-106	iNK/iT	Multi-specific	ММ						t ^{ill} ı Bristol Myers Squib
CNTY-107	γδ ίΤ	Nectin-4	SolidTumors						
Research	iT	Not disclosed	Solid Tumors						
Research	ink/it	TBD	Hematologic and Solid Tumors						

Autoimmune and Inflammatory Diseases

Hematologic Tumors

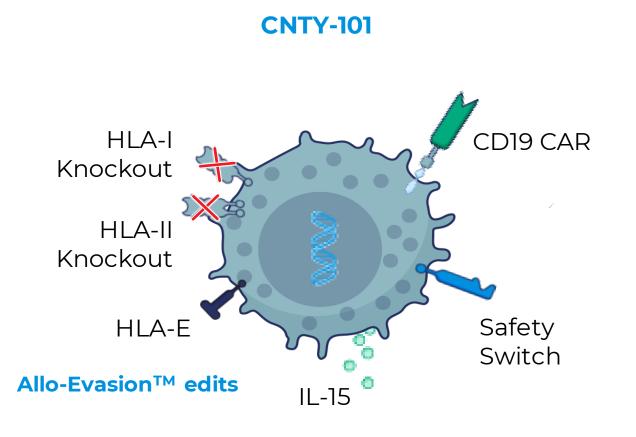
Solid Tumors



CNTY-101 Clinical Programs

CNTY-101: Differentiated next-gen CD19 targeted product

Only cell therapy with six precision gene edits currently in the clinic



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 in relapsed/refractory B-cell lymphomas

Aim: To deliver durable responses via repeat dosing facilitated by Allo-Evasion[™] and extending the period of pharmacologic pressure on tumor cells





Unmet need:	Potential solution from Century's platform:
 Autologous CD19 CAR-T is curative in ~40%¹ of patients Autologous CD19 CAR-T access is limited and/or can fail in manufacturing as quality is dependent on patient- derived starting material 	 Off-the-shelf product offers immediate access and consistency Multiple doses to increase pharmacological pressure to increase durability
 Limited options and poor prognosis for patients who fail autologous CAR-T 	 Host rejection addressed by Allo-Evasion[™] edits





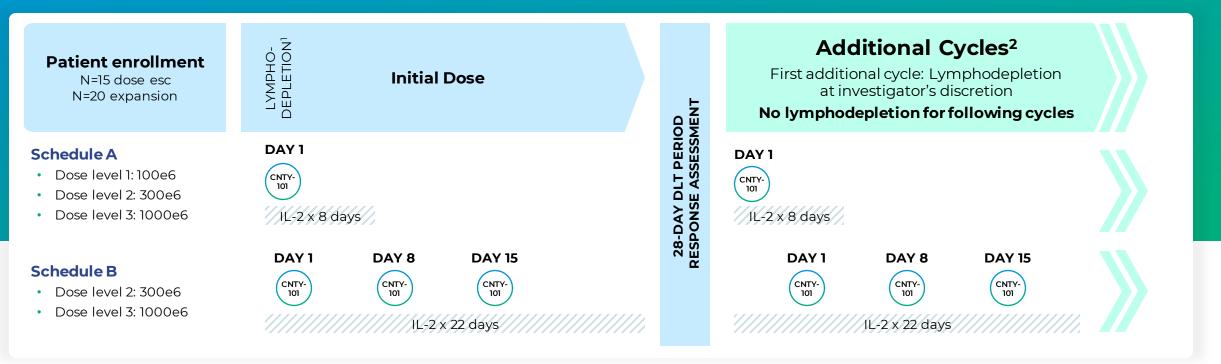
CNTY-101: ELiPSE-1 (NCT05336409) Phase 1 BOIN design

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
²Subjects 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 enrolled heavily pretreated patients

Baseline characteristics						
Patientstreated	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	3ª (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 (mm²) (range)	2044 (641-29716)					



ELiPSE-1: Favorable initial safety profile

			TREATMENT		SAFETY						
COHORT	COHORT PATIENT	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
	1	iFL	4	Ν	Refractory	100 x 10 ⁶	7	Ν	N	N	Ν
DOSE	2	DLBCL/tFL	4	Y	Refractory	100 x 10 ⁶	1	Ν	Ν	N	Ν
LEVEL1	3	DLBCL	2	N ^a	Refractory	100 x 10 ⁶	1	Ν	N	N	Ν
	4	DLBCL/tMZL	4	Ν	Refractory	100 x 10 ⁶	1	Ν	Y(1)	N	Υ
	5	MZL	4	Ν	Refractory	300 x 10 ⁶	2	Ν	Y(2)	N	Υ
DOSE LEVEL 2	6	DLBCL	4	Υ	Refractory	300 x 10 ⁶	1	Ν	Ν	N	Ν
	7	DLBCL/tFL	6	Υ	Relapsed	300 x 10 ⁶	1*	N*	N*	N*	N*



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

		DISEASE HISTORY					TREATMENT		S	RESPONSE		
COHORT	PATIENT	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
	1	iFL	4	Ν	Refractory	100 x 10 ⁶	7	Ν	Ν	Ν	N	CR
DOSE	2	DLBCL/tFL	4	Υ	Refractory	100 x 10 ⁶	1	Ν	Ν	Ν	N	PD
LEVEL1	3	DLBCL	2	Nª	Refractory	100 x 10 ⁶	1	Ν	Ν	Ν	N	PD
	4	DLBCL/tMZL	4	N	Refractory	100 x 10 ⁶	1	Ν	Y	Ν	Y	PD
	5	MZL	4	N	Refractory	300 x 10 ⁶	2	N	Y	N	Y	PR
DOSE LEVEL 2	6	DLBCL	4	Y	Refractory	300 x 10 ⁶	1	Ν	Ν	Ν	N	PD
	7	DLBCL/tFL	6	Υ	Relapsed	300 x 10 ⁶	1*	N*	N*	N*	N*	CR*



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 Ramachandran¹, Sarah Rothman¹, Mariano Clausi¹, Kile McFadden¹, Brenda Salantes¹, Gloria Jih¹, Thomas Brigman¹, Sam Kelly¹, Matthew S. Hall¹, Stephanie Yee¹, Iphigenia Koumenis¹, Poulomee Das¹, Jordan Briggs², Tori Braun², Ying Yuan³, Elizabeth Devlin¹, Adrienne Farid¹, Nikolaus Trede¹, Tamara K. Moyo⁵, Tahir Latif⁴, Krish Patel²

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

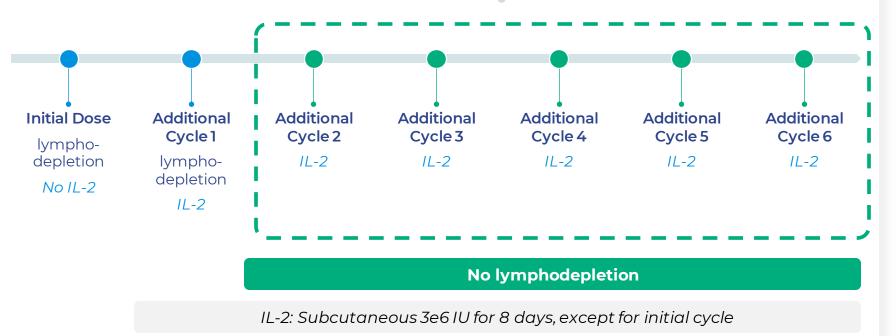


Sex/Age: Female/63

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



*Data cutoff date of November 13, 2023; represents data verified post data cut ^Patient subsequently progressed Ramachandran, et al. 2023 ASH Annual Conference



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







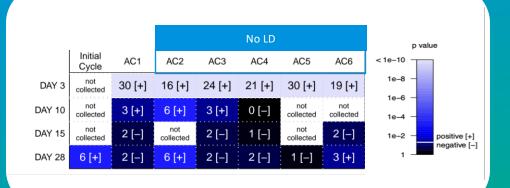
Allo-Evasion[™] enables repeat dosing without the need for continued lymphodepletion

Initial clinical evidence indicates no sign of allo-rejection for CNTY-101 (ASH case study)

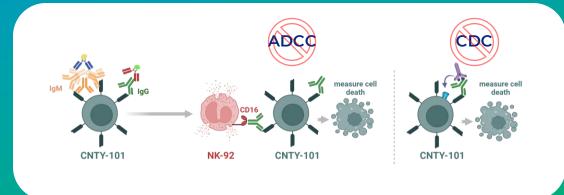


ELiPSE-1 Clinical Data

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



Clinical patient case from Ph1 ELiPSE-1 trial. 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 (seven cycles evaluated)



ADCC: Antibody-dependent cellular cytotoxicity CDC: Complement dependent cytotoxicity



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

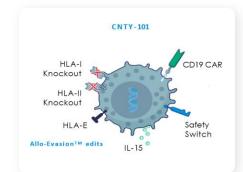


We believe CNTY-101's manageable initial safety profile, initial response data, and PK/PD supports advancing to higher doses to potentially deepen and prolong clinical response

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



Key differentiators of CNTY-101 in autoimmune disease treatment



CNTY-101: CD-19 targeted iNK cell therapy with 6 precision gene edits including Allo-Evasion[™] technology

- Currently being studied in Ph1 ELiPSE-1 trial in R/R NHL
- Ph1CALiPSO-1trial in SLE initiating in H1 2024

Key differentiators in AID: (1) Allogeneic (2) NK cells (3) Allo-Evasion™

Allogeneic	NK cells	Allo-Evasion™				
 Available "off-the-shelf" No patient apheresis required No manufacturing wait time Platform enables lower COGs than donor-derived or autologous 	 Killing potency ≥ primary CAR-T Trafficking to secondary lymphoid tissues and marrow favors pathogenic B-cell targeting Limited <i>in vivo</i> expansion 	 Avoiding host immune rejection Ability to repeat dose without continued lymphodepletion Ability to retreat, if needed 				
	Tighter control over drug exposure:					

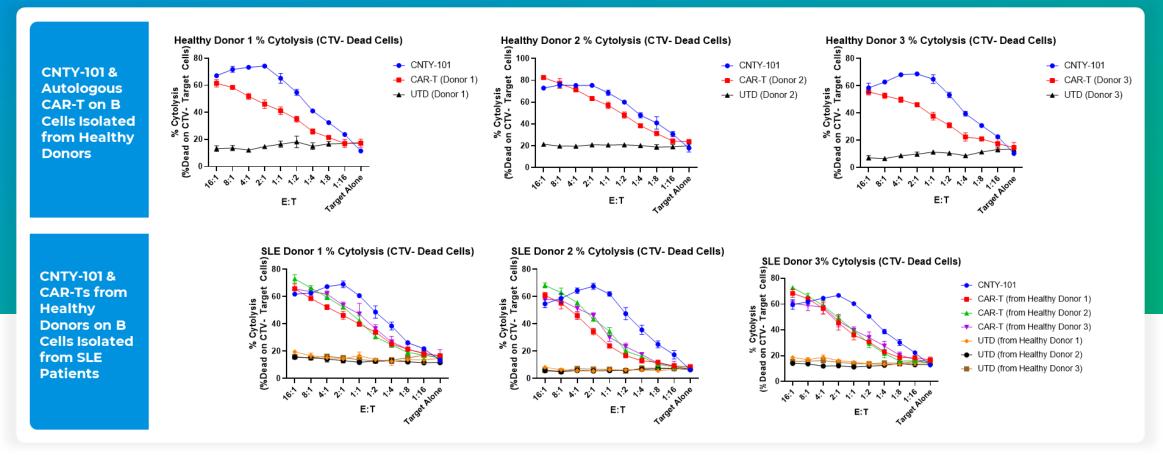
B-cell depletion without prolonged B-cell aplasia



CNTY-101: Potential to drive B-cell depletion with tighter control over drug exposure

More potent than primary CAR-T at B-cell killing in pre-clinical comparison

CNTY-101 more potent than primary CAR-T cells at B-cell killing at 24 hours in pre-clinical 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.



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







- 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

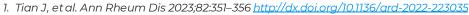
Despite approved treatments, significant unmet need remains

- Chronic treatment with broadacting 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 SLE²

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



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: CALiPSO-1 systemic lupus erythematosus Phase 1 study

	oderate to severe SLE after 2+ nosuppressive therapies	 Endpoints: Key endpoints: Safety, SLE manifestations per SLEDAI, LLDAS, DORIS Translational Endpoints: B-cell depletion, auto-antibody decline 					
Patient Enrollment Upto N=26		Additional Cycle RESPONSE Assessments Months 2-12					
ScheduleDose level 1: 300eDose level 2: 1000		DAY 1 DAY 8 DAY 15 101 101 101					

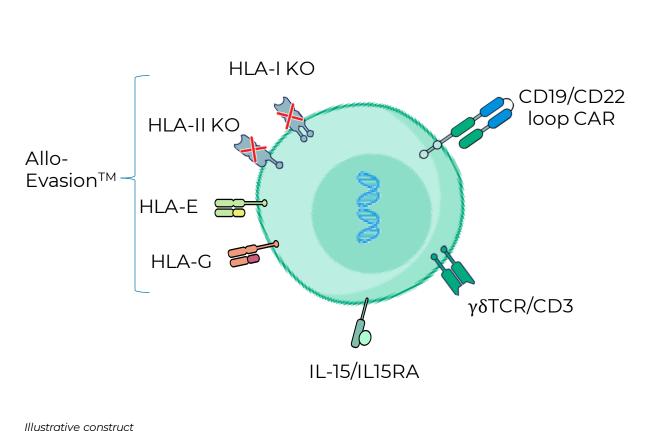
Trial planned to initiate in the first half of 2024; initial data expected by year-end 2024





Discovery Programs

CNTY-102: Leveraging the next generation $\gamma\delta$ iT and iNK cell platform designed to deliver best-in-class potential



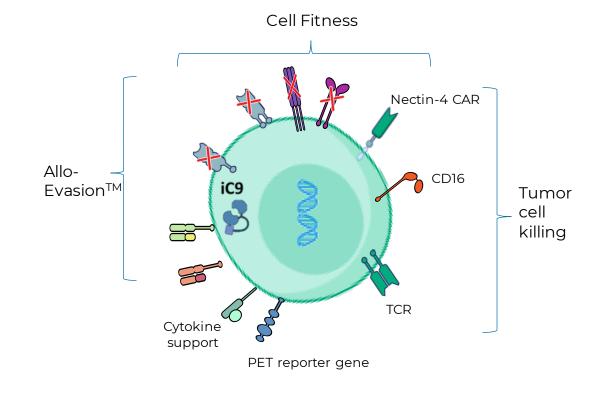
CNTY-102

Designed to address factors that limit durability of cell therapy in B-cell malignancies

- iNK and γδiT cells have distinct properties that provide optionality in the face of different biological challenges
- Dual targeting designed to counter antigen escape relapse - a major limiting factor for durability of CD19 CAR T therapies
- Armed with Allo-Evasion[™] edits to enable repeat dosing to potentially deliver durable responses



CNTY-107: First in class Nectin-4 targeted $\gamma\delta$ iT cell therapy



CNTY-107

Leveraging the power of the $\gamma\delta$ iT cell platform for solid tumors

Nectin-4 has been validated by ADC approaches

- Opportunity to address multiple Nectin-4
 positive solid tumors
 - Potential indications include bladder, breast, pancreatic, non-small cell lung cancer, esophageal/gastric, head and neck, and/or ovarian cancers¹

$\gamma\delta$ iT allogeneic therapies provide potential to improve upon ADC toxicity profile and efficacy

- Intrinsic homing of $\gamma\delta$ iT cells to tissues and solid malignancies
- Multi-tumor killing modalities to tackle heterogeneity



Illustrative construct



Corporate Position & Upcoming Milestones

Advancing next-generation iPSC-derived allogeneic NK and T cell therapy candidates for the treatment of cancer and autoimmunity

Differentiated pipeline based on Allo-Evasion[™] technology

• Potential to overcome limitations of conventional allogeneic cell therapy

Encouraging preliminary clinical data from Phase 1 trial of CNTY-101 in R/R B-cell lymphomas

• Well-tolerated with early evidence of anti-lymphoma activity, and supports the ability to re-dose without lymphodepletion

Expanding into additional autoimmune indications

- CNTY-101 has differentiated profile in AID (allogeneic, iNK with Allo-Evasion[™])
- Clade Therapeutics acquisition further expands and enhances
 autoimmune opportunities and platform technology

In-house manufacturing capabilities

• Ability to accelerate learnings and enable faster product iteration

MULTIPLE NEAR-TERM CATALYSTS

Phase 1 ELiPSE-1 trial of CNTY-101 in B-cell malignancies

• Additional data expected in mid-2024

Phase 1 trial of CNTY-101 in SLE

- IND clearance obtained & initiation expected in 1H 2024
- Initial clinical data expected by YE 2024

Pursuing additional autoimmune health authority filings for CNTY-101 in 2024

CASH RESOURCES

Cash runway into 2026

Ended 4Q23 with cash, cash equivalents, and investments of \$261.8M



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

LIMITLESS POTENTIAL...

PRECISION DESIGN...

ENDURING IMPACT...

Foundational investments in iPSC technology, genetic editing, protein engineering, and manufacturing

Progressing differentiated clinical programs based on Allo-Evasion[™] technology in oncology and autoimmune and inflammatory diseases

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

