

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): December 9, 2023

Century Therapeutics, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

001-40498
(Commission File Number)

84-2040295
(I.R.S. Employer
Identification No.)

25 North 38th Street, 11th Floor
Philadelphia, Pennsylvania
(Address of principal executive offices)

19104
(Zip Code)

Registrant's telephone number, including area code: (267) 817-5790

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol	Name of Exchange on Which Registered
Common Stock, par value \$0.0001 per share	IPSC	Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 8.01 Other Events

On December 9, 2023, Century Therapeutics, Inc. (the "Company") issued a press release announcing the presentation of initial clinical data from a single-patient case study in which the Company believes support the potential for a multi-dosing strategy for CAR iNK enabled by Allo-Evasion™ edits at the 65th American Society of Hematology Annual Meeting and Exposition, being held December 9-12th in San Diego, California. A copy of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

On December 11, 2023, the Company updated information reflected in a slide presentation, which is attached as Exhibit 99.2 to this Current Report on Form 8-K and is incorporated herein by reference. Representatives of the Company will use the updated presentation in various meetings with investors from time to time.

Item 9.01 Financial Statements and Exhibits**(d) Exhibits**

Exhibit No.	Document
99.1	Press Release of Century Therapeutics, Inc., dated December 9, 2023
99.2	Investor Presentation of Century Therapeutics, Inc., dated December 11, 2023
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

CENTURY THERAPEUTICS, INC.

By: /s/ Brent Pfeiffenberger, Pharm.D.
Name: Brent Pfeiffenberger, Pharm.D.
Title: President and Chief Executive Officer

Date: December 11, 2023



Century Therapeutics Presents Initial Data from CNTY-101 Phase 1 ELiPSE-1 Trial Supporting the Potential for a Multi-Dosing Strategy for CAR iNK Enabled by Allo-Evasion™ Edits

– Data presented at 65th ASH Annual Meeting show CNTY-101 was generally well tolerated at Dose Level 1 (100 million cells) in a high-risk, heavily pretreated R/R B-cell lymphoma patient –

– Preliminary clinical data demonstrate six-month durable complete response in Dose Level 1 in a single patient following multiple cycles of CNTY-101 without lymphodepletion –

– Pharmacokinetic data suggests CNTY-101 exposure may be maintained upon administration of additional cycles without lymphodepletion due to lack of observed allo-rejection –

– Company to host conference call on Monday, December 11 at 7:30 AM PT/10:30 AM ET to review ASH data including additional clinical results from Dose Level 1 (100 million cells) and Dose Level 2 (300 million cells), as well as clinical plans for CNTY-101 in systemic lupus erythematosus –

PHILADELPHIA, December 9, 2023 – [Century Therapeutics \(NASDAQ: IPSC\)](#), an innovative biotechnology company developing induced pluripotent stem cell (iPSC)-derived cell therapies in immuno-oncology and autoimmune and inflammatory disease, today announced the presentation of initial clinical data from a single-patient case study which Century believes support the potential for a multi-dosing strategy for CAR iNK enabled by Allo-Evasion™ edits at the 65th American Society of Hematology (ASH) Annual Meeting and Exposition, being held December 9-12 in San Diego. The poster, titled, “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”, is available on the [Scientific Resources](#) page of the Company’s website.

“We are thrilled that the initial clinical evidence for CNTY-101 provides support for the potential for Allo-Evasion™ to enable a multi-dosing regimen without the need for continued lymphodepletion. This is highly encouraging in advancing our goal to increase persistence of the cells during the treatment period and potentially lead to deeper and more durable responses,” said Brent Pfeiffenberger, Pharm.D., Chief Executive Officer of Century Therapeutics. “We look forward to advancing the study at both higher and more frequent doses of CNTY-101, and plan to present additional clinical data in mid-2024.”

“As the first cell therapy product candidate engineered with six precision gene edits aimed at providing selectivity and persistence, CNTY-101 is positioned to potentially fill a high unmet need among heavily pretreated non-Hodgkin lymphoma patients,” said Krish Patel, M.D., Director of Lymphoma Program, Director of Hematologic Malignancies and Cellular Therapy, Swedish Cancer Institute, Seattle. “The encouraging initial data presented today from this patient who received low doses of CNTY-101 exhibits signals of persistence of CNTY-101 cells out of circulation and supports testing at higher doses. I look forward to the continuation of the study and to further investigating the full therapeutic potential of CNTY-101.”



Data featured in a single-patient case study presented at ASH involves a 63-year-old patient with relapsed/refractory (R/R) progressive follicular lymphoma previously treated with four prior lines of therapy who was enrolled at Dose Level 1 (100 million cells). As of a data cutoff date of November 13, 2023, the patient has received seven 28-day cycles of a single infusion of CNTY-101 at Dose Level 1. Cycles one and two included three days of lymphodepletion (LD), whereas cycles three through seven were given with no LD. Interleukin-2 (IL-2) was administered for all cycles except for the first. The patient maintained a complete response with a duration of six months before subsequently progressing.

Data from the single-patient case study indicated that CNTY-101 was generally well tolerated in this patient at Dose level 1 (100 million cells). No dose-limiting toxicities, cytokine release syndrome or immune effector cell-associated neurotoxicity syndrome were observed, and no adverse events related to treatment with CNTY-101 were detected in this patient, to date. Additionally, no concerted changes in inflammatory cytokines and mediators associated with cytokine release syndrome or neurotoxicity have been detected in this patient.

Following administration of two cycles with and three cycles without LD, serum assessments from available data of the first five cycles of CNTY-101 treatment in this patient showed no evidence of functional pre-existing or induced humoral immunogenicity against CNTY-101. Importantly, tumor microenvironment initial analyses demonstrated a vigorous increase in T cells within 8 days of the 1st CNTY-101 cell infusion. Increases in proliferating cytotoxic T cells and TNF α and IFN γ -secreting cells were observed, suggestive of induction of adaptive immune responses within the tumor. Additionally, ddPCR analysis of CNTY-101 genomic DNA and cell-free DNA from Dose Level 1 patient (n=4) samples suggest that CNTY-101 cells were able to traffic out of circulation shortly after infusion and showed persistence in tissues for at least 3 days.

In addition to the preliminary clinical data presented today, the Company will also present additional results from patients treated at Dose Level 1 (100 million cell dose), as well as preliminary data from three patients treated at Dose Level 2 (300 million cell dose) during a conference call and webcast on Monday, December 11 at 7:30 AM PT/10:30 AM ET. In addition, the Company will discuss its planned Phase 1 trial, including supporting preclinical data, for CNTY-101 in systemic lupus erythematosus, the Company's first autoimmune and inflammatory disease indication.

Conference Call and Webcast

The live audio webcast and accompanying slides may be accessed through the [Events & Presentations page](#) in the Investors section of the Company's website. Alternatively, the conference call may be accessed through the following:

- Conference ID: century2023
- Domestic Dial-in Number: (800) 590-8290
- International Dial-in Number: (240) 690-8800
- Live webcast: <https://century-therapeutics-initial-clinical-data-call.open-exchange.net/>

For those unable to participate in the conference call or webcast, a replay will be available on the Investors section of the Company's website at www.centurytx.com approximately 24 hours after the conference call and will be available for 90 days following the call.



About Allo-Evasion™

Century's proprietary Allo-Evasion™ technology is used to engineer cell therapy product candidates with the potential to evade identification by the host immune system so they can be dosed multiple times without rejection, enabling increased persistence of the cells during the treatment period and potentially leading to deeper and more durable responses. More specifically, Allo-Evasion™ 1.0 technology incorporates three gene edits designed to avoid recognition by patient/host CD8+ T cells, CD4+ T cells and NK cells. Knockout of beta-2-microglobulin or $\beta 2m$, designed to prevent CD8+ T cell recognition, knock-out of the Class II Major Histocompatibility Complex Transactivator, or CIITA, designed to prevent CD4+ T cell recognition, and knock-in of the HLA-E gene, designed to enable higher expression of the HLA-E protein to prevent killing of CNTY-101 cells by host NK cells. Allo-Evasion™ technology may allow the implementation of more flexible and effective repeat dosing protocols for off-the-shelf product candidates.

About ELiPSE-1

The Phase 1 ELiPSE-1 trial ([NCT05336409](#)) is intended to assess the safety, tolerability, pharmacokinetics, and preliminary efficacy of CNTY-101 in adult patients with relapsed or refractory CD19-positive B-cell lymphomas. All patients will receive an initial standard dose of conditioning chemotherapy consisting of cyclophosphamide (300 mg/m²) and fludarabine (30mg/m²) for 3 days. Schedule A of the trial includes a single-dose escalation of CNTY-101 and subcutaneous IL-2. Schedule B will evaluate a three-dose schedule per cycle of CNTY-101. Patients who demonstrate a clinical benefit are eligible for additional cycles of treatment with or without additional lymphodepletion.

About CNTY-101

CNTY-101 is an investigational off-the-shelf immunotherapy product candidate that utilizes iPSC-derived natural killer (NK) cells with a CD19-directed chimeric antigen receptor (CAR) and includes Century's core Allo-Evasion™ edits designed to overcome the three major pathways of host versus graft rejection - CD8+ T cells, CD4+ T cells and NK cells. In addition, the product candidate is engineered to express IL-15 to provide homeostatic cytokine support, which has been shown pre-clinically to improve functionality and persistence. Further, to potentially improve safety, the iNK cells were engineered with an EGFR safety switch, and proof-of-concept studies have demonstrated that the cells can be quickly eliminated by the administration of cetuximab, an antibody against EGFR approved by the U.S. Food and Drug Administration for certain cancers. Century is currently assessing CNTY-101 in patients with relapsed or refractory CD19-positive B-cell lymphomas in its Phase 1 ELiPSE-1 clinical trial and intends to initiate its second Phase 1 clinical trial assessing CNTY-101 in patients with moderate to severe systemic lupus erythematosus.

About Century Therapeutics

Century Therapeutics (NASDAQ: IPSC) is harnessing the power of adult stem cells to develop curative cell therapy products for cancer and autoimmune and inflammatory diseases that we believe will allow us to overcome the limitations of first-generation cell therapies. Our genetically engineered, iPSC-derived cell product candidates are designed to specifically target hematologic and solid tumor cancers, with a broadening application to autoimmune and inflammatory diseases. We are leveraging our expertise in cellular reprogramming, genetic engineering, and manufacturing to develop therapies with the potential to overcome many of the challenges inherent to cell therapy and provide a significant advantage over existing cell therapy technologies. We believe our commitment to developing off-the-shelf cell therapies will expand patient access and provide an unparalleled opportunity to advance the course of cancer and autoimmune and inflammatory disease care. For more information on Century Therapeutics please visit www.centurytx.com.



Century Therapeutics Forward-Looking Statement

This press release contains forward-looking statements within the meaning of, and made pursuant to the safe harbor provisions of, The Private Securities Litigation Reform Act of 1995. All statements contained in this press release, other than statements of historical facts or statements that relate to present facts or current conditions, including but not limited to, statements regarding our clinical development plans and timelines, 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 press release 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 press release 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 of 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, banking instability 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 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; our ability to recruit and maintain key members of management 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.



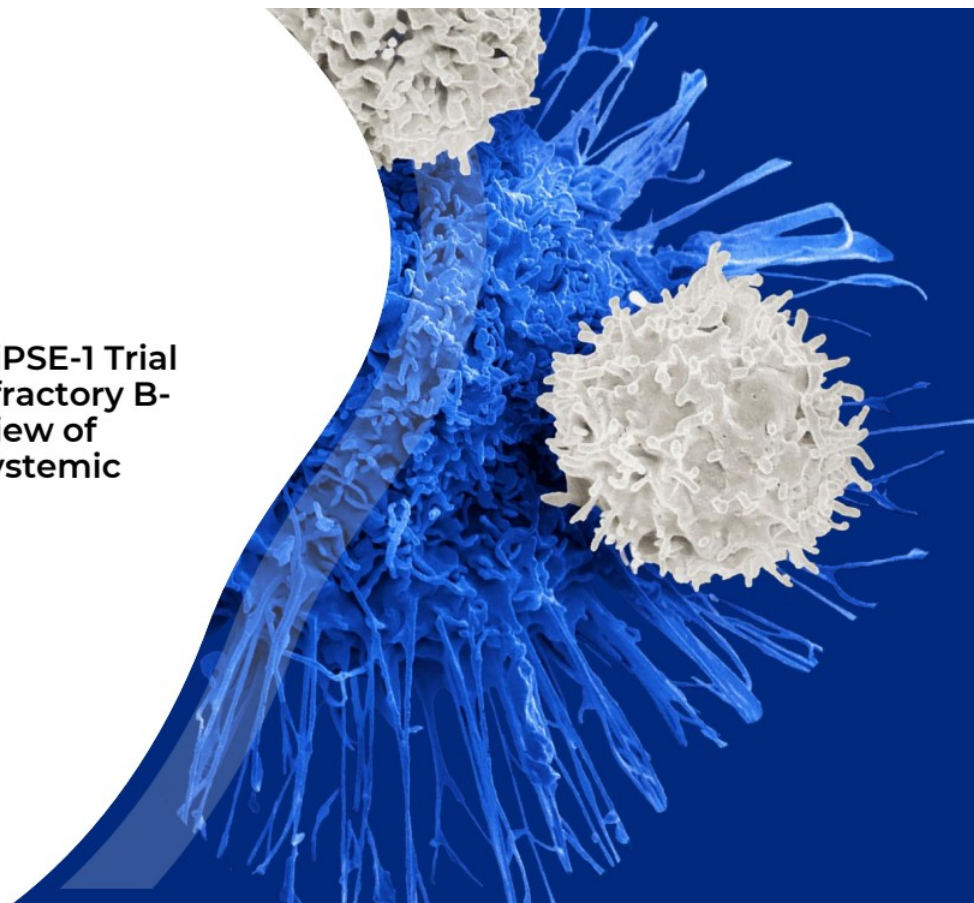
For More Information:

Investors/Media: Melissa Forst/Maghan Meyers – century@argotpartners.com



**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 materially differ 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 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 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 approved; and our ability to maintain and successfully enforce adequate intellectual property protection. These and other risks and uncertainties are describe 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...

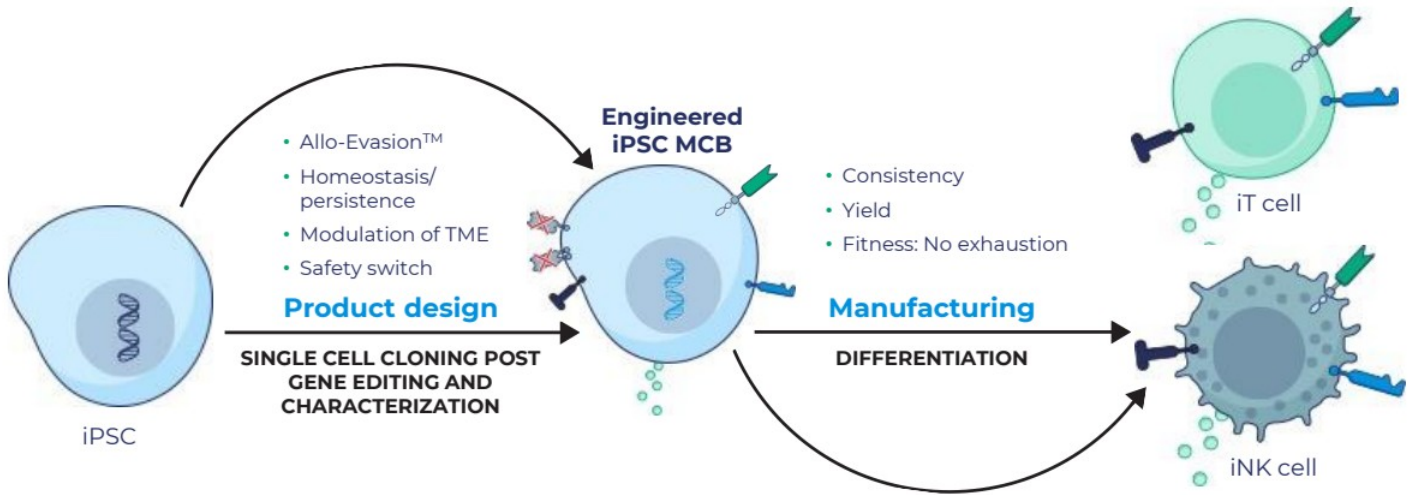
Well-capitalized into 2026 to enable delivery on key milestones and clinical data



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

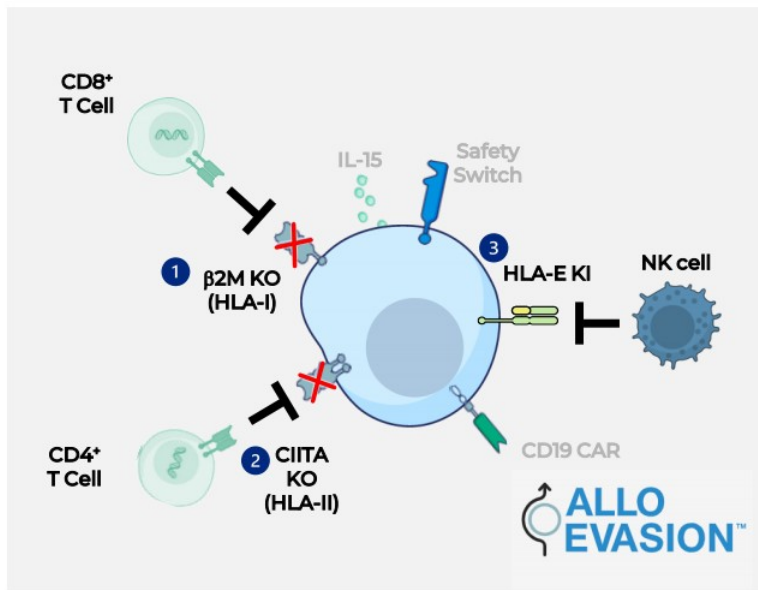


Versatility and unprecedented control: Century's next-generation allogeneic iPSC technology platform



Iterative optimization of product functionality and manufacturability

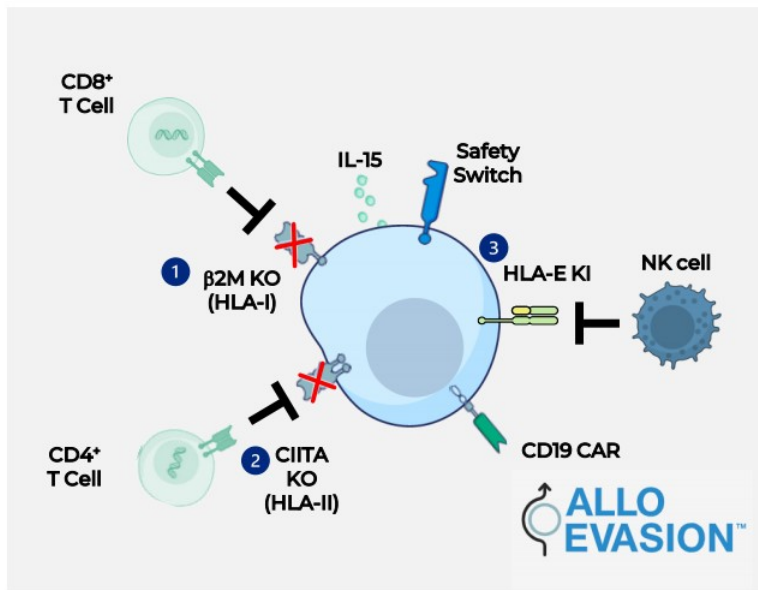
Allo-Evasion™ 1.0 designed to overcome 3 major pathways of host vs. graft rejection



Three core edits disarm host cells from eliminating therapy

1. Deletion of $\beta 2M$, a protein required to express HLA-I 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 and 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





Review of Initial ELiPSE-1 Data for CNTY-101



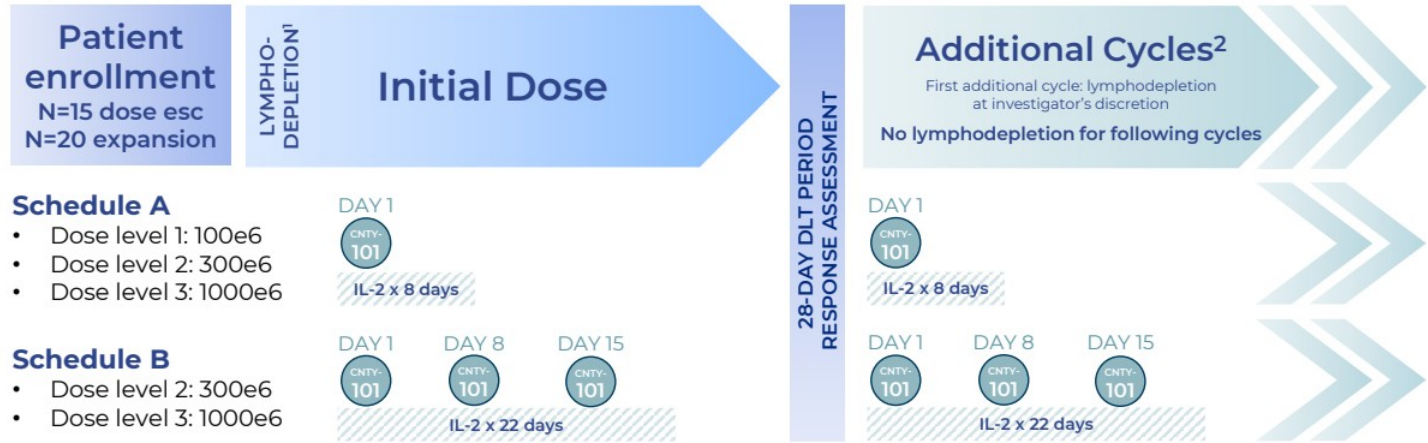
CNTY-101: ELiPSE-1 (NCT05336409) Phase 1 BOIN design

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, CF 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	CNT Related AE
DOSE LEVEL 1	1	iFL	4	N	Refractory	100 x 10 ⁶	7	N	N	N	
	2	DLBCL/tFL	4	Y	Refractory	100 x 10 ⁶	1	N	N	N	
	3	DLBCL	2	N ^a	Refractory	100 x 10 ⁶	1	N	N	N	
	4	DLBCL/tMZL	4	N	Refractory	100 x 10 ⁶	1	N	Y (1)	N	
DOSE LEVEL 2	5	MZL	4	N	Refractory	300 x 10 ⁶	2	N	Y (2)	N	
	6	DLBCL	4	Y	Refractory	300 x 10 ⁶	1	N	N	N	
	7	DLBCL/tFL	6	Y	Relapsed	300 x 10 ⁶	1*	N*	N*	N*	

*Data cutoff date of November 13, 2023; represents data verified post data cut
a. CAR T manufacturing failure

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	
DOSE LEVEL 1	1	iFL	4	N	Refractory	100 x 10 ⁶	7	N	N	N	N	CR
	2	DLBCL/tFL	4	Y	Refractory	100 x 10 ⁶	1	N	N	N	N	PR
	3	DLBCL	2	N ^a	Refractory	100 x 10 ⁶	1	N	N	N	N	PR
	4	DLBCL/tMZL	4	N	Refractory	100 x 10 ⁶	1	N	Y	N	Y	PR
DOSE LEVEL 2	5	MZL	4	N	Refractory	300 x 10 ⁶	2	N	Y	N	Y	PR
	6	DLBCL	4	Y	Refractory	300 x 10 ⁶	1	N	N	N	N	PR
	7	DLBCL/tFL	6	Y	Relapsed	300 x 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 Ramachandran¹, Sarah Rothman¹, Mariano Clausi¹, Kile McFadden¹, Brenda Salantes¹, Gloria Jih¹, Thomas Brigman¹, Sam Kelly¹, Matthew S. Hall¹, Stephanie Yee Iphigenia Koumenis¹, Poulomee Das¹, Jordan Briggs², Tori Braun², Ying Yuan³, Elizabeth Devlin¹, Adrienne Farid¹, Nikolaus Trede¹, Tamara K. Moyo⁵, Tahir Latif⁴, Krish Patel¹

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



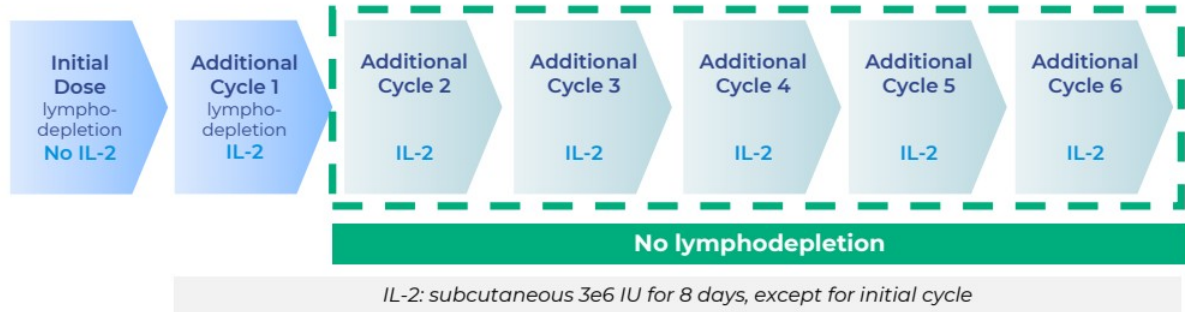
Sex/Age: Female/63

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

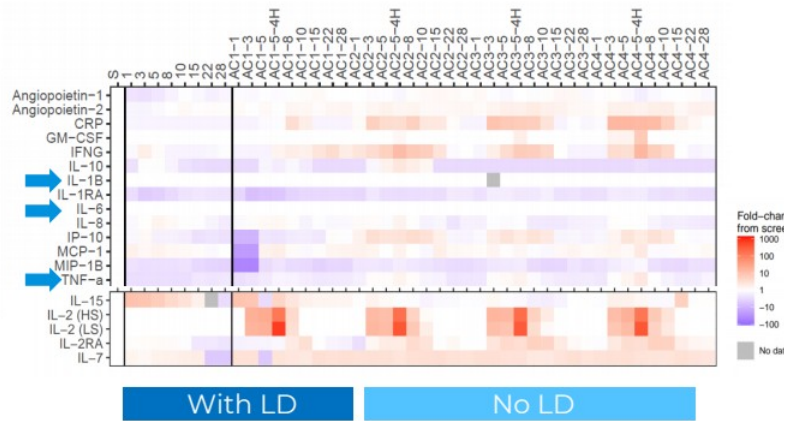
Ramachandran, et al. 2023 ASH Annual Conference



ASH case study: Favorable initial safety profile

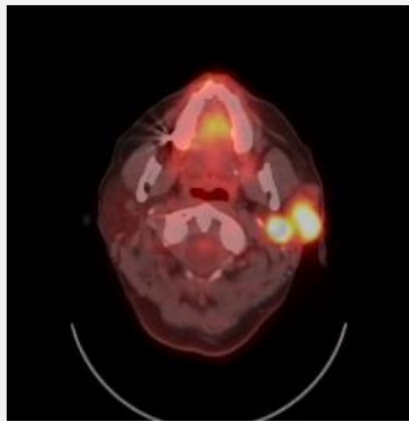
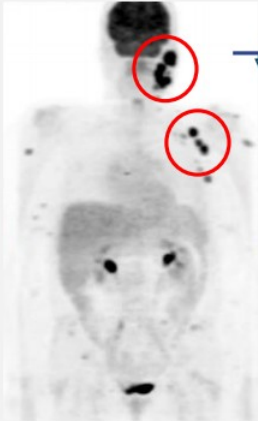
Safety profile in first 7 subjects:

- 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

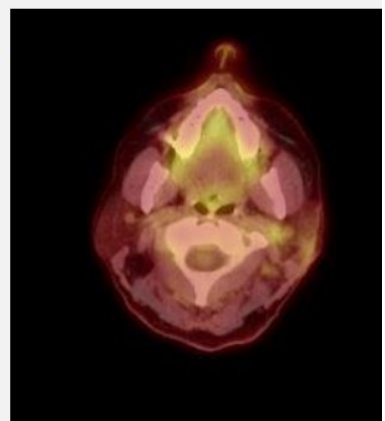
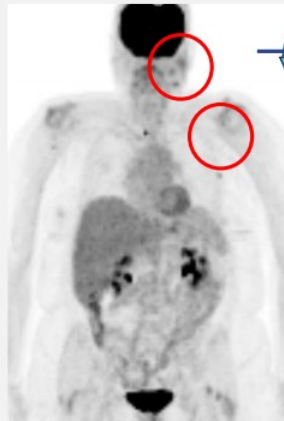


*Data cutoff date of November 13, 2023; represents data verified post data cut
 AC: Additional Cycle
 Ramachandran, et al. 2023 ASH Annual Conference

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



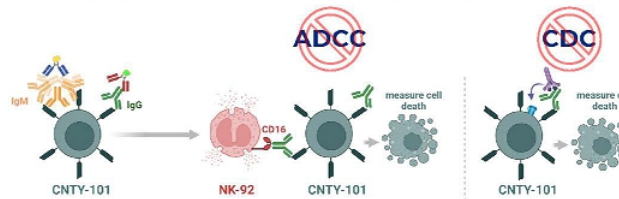
CNTY-101 cells persist in tissues for at least three days as measured cfDNA; consistent CNTY-101 cfDNA levels are observed with and without LD at Day 3

Initial Cycle	AC1	AC2	AC3	AC4	AC5	p value	
DAY 3	not collected	30 [+]	16 [+]	24 [+]	21 [+]	30 [+]	< 1e-10
DAY 10	not collected	3 [+]	6 [+]	3 [+]	0 [-]	not collected	1e-8
DAY 15	not collected	2 [-]	not collected	2 [-]	1 [-]	not collected	1e-6
DAY 28	6 [+]	2 [-]	6 [+]	2 [-]	2 [-]	1 [-]	1e-4
							1e-2
							1

Legend: positive [+], negative [-]

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

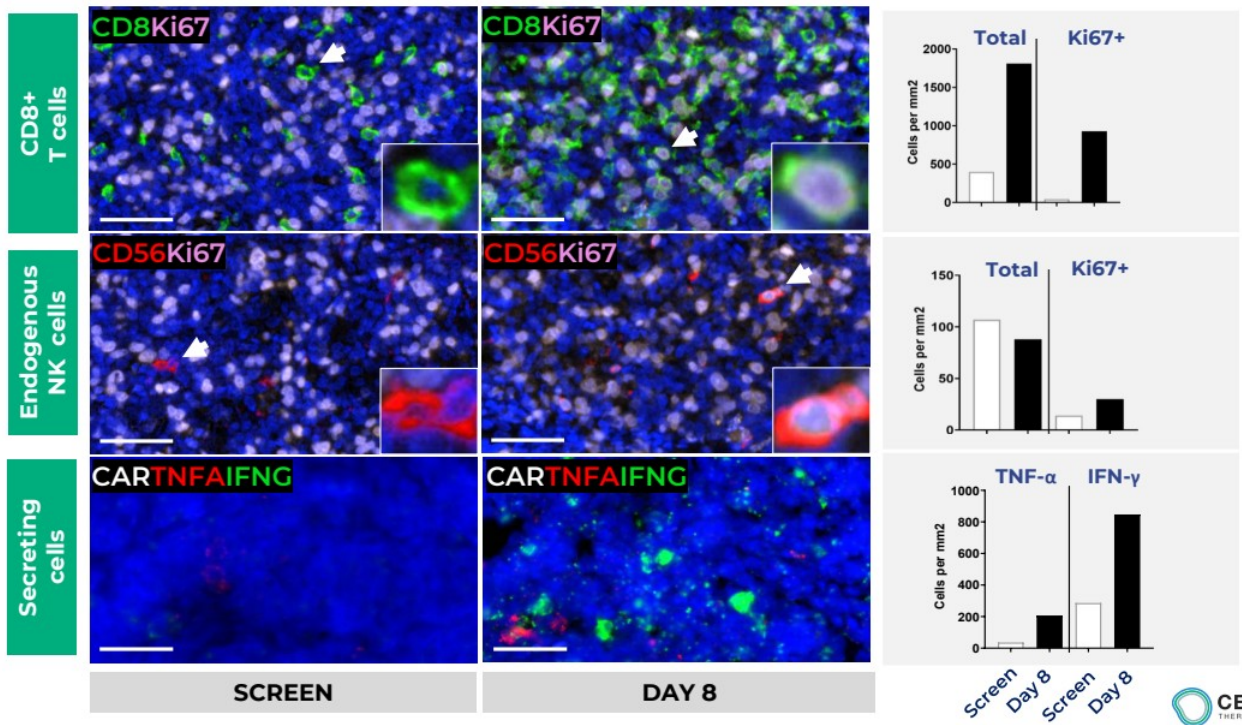
Anti-drug antibodies and functional humoral immune response against CNTY-101 are not detected (five cycles evaluated)



cfDNA: cell-free DNA, LD: lymphodepletion
Romachandran, 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



CNTY-101 in Systemic Lupus Erythematosus



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

Estimated global prevalence of 3.4 million patients¹

- 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 remain

- 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 SLE²

- 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

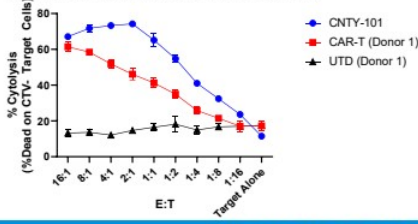
HDR: homology-directed repair



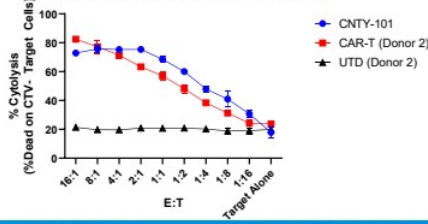
CNTY-101 initial clinical data comparable to primary CAR-T cell at B-cell killing at 24 hours

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

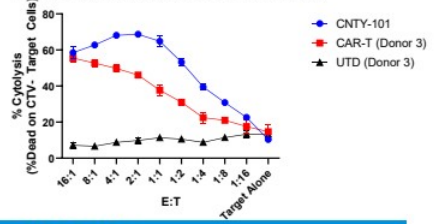
Healthy Donor 1 % Cytolysis (CTV- Dead Cells)



Healthy Donor 2 % Cytolysis (CTV- Dead Cells)

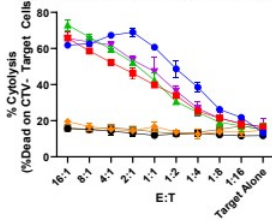


Healthy Donor 3 % Cytolysis (CTV- Dead Cells)

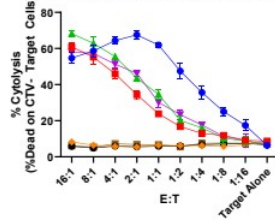


CNTY-101 & CAR-Ts from Healthy Donors on B Cells Isolated from SLE Patients

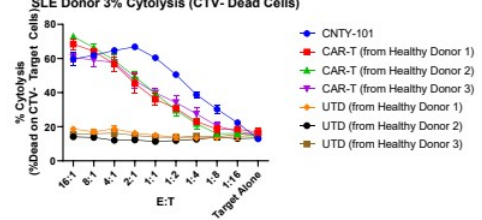
SLE Donor 1 % Cytolysis (CTV- Dead Cells)



SLE Donor 2 % Cytolysis (CTV- Dead Cells)



SLE Donor 3 % Cytolysis (CTV- Dead Cells)



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.

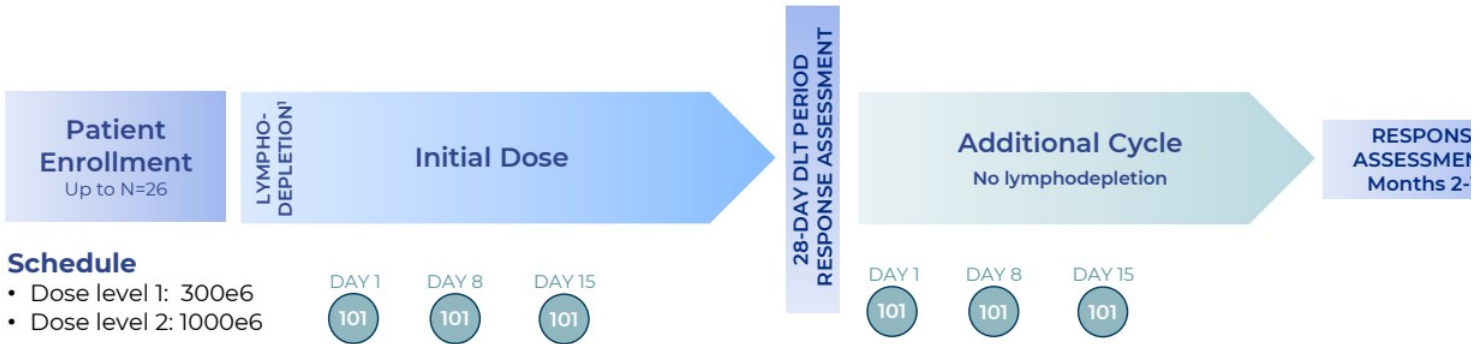
CNTY-101: Systemic lupus erythematosus Phase 1 study

Inclusion:

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

Endpoints:

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



Schedule

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

DAY 1
101

DAY 8
101

DAY 15
101

DAY 1
101

DAY 8
101

DAY 15
101

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			Collaborator
						P1	P2	P3	
CNTY-101	iNK	CD19	B-Cell Malignancies	[Hematologic Tumors]					
			Systemic Lupus Erythematosus	[Autoimmune and Inflammatory Diseases]					
CNTY-102	iT	CD19 + CD22	B-Cell Malignancies	[Hematologic Tumors]					
CNTY-107	iT	Nectin-4	Solid Tumors	[Solid Tumors]					
Programs in Collaboration									
CNTY-104	iNK/iT	Multi-specific	Acute Myeloid Leukemia	[Hematologic Tumors]					Bristol Myers Squibb
CNTY-106	iNK/iT	Multi-specific	Multiple Myeloma	[Hematologic Tumors]					Bristol Myers Squibb
Research Programs									
Discovery	iNK/iT	TBD	Hematological / Solid Tumors	[Hematologic Tumors]					

● Solid Tumors
 ● Hematologic Tumors
 ● Autoimmune and Inflammatory Diseases





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*



**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

