

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): June 3, 2024

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 June 3, 2024, Century Therapeutics, Inc. (the "Company") issued a press release announcing a poster presentation highlighting interim results from the ongoing Phase 1 ELiPSE-1 study evaluating CNTY-101 in relapsed or refractory non-Hodgkin lymphoma at the American Society of Clinical Oncology Annual Meeting being held May 31, 2024 through June 4, 2024 in Chicago, Illinois. 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 June 3, 2024, the Company updated information reflected in a slide presentation, which is attached hereto 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 June 3, 2024
99.2	Investor Presentation of Century Therapeutics, Inc., dated June 3, 2024
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: June 3, 2024



Century Therapeutics Presents Interim Results from Phase 1 ELiPSE-1 Study at ASCO 2024 Annual Meeting

In ongoing dose escalation, CNTY-101 has demonstrated a manageable safety profile with no observed DLTs or GvHD and with majority of patients treated in outpatient setting

Encouraging preliminary efficacy in heavily pretreated R/R NHL at initial dose levels

Novel cell-free DNA method for detecting total body PK suggests CNTY-101 persists outside the bloodstream

Enrollment continues in dose escalation phase of ELiPSE-1 at dose levels 3B (three weekly infusions of 1 billion cells) and 4A (single infusion of 3 billion cells) per cycle

PHILADELPHIA, June 3, 2024 – 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 a poster presentation highlighting interim results from the ongoing Phase 1 ELiPSE-1 study evaluating CNTY-101 in relapsed or refractory (R/R) non-Hodgkin lymphoma (NHL) at the American Society of Clinical Oncology (ASCO) Annual Meeting being held May 31 – June 4, 2024 in Chicago, Illinois.

CNTY-101 is an investigational CD19 targeting allogeneic, iPSC-derived natural killer (NK) cell therapy with six precision gene edits powered by Century's Allo-Evasion™ technology enabling repeat dosing without the need for continued lymphodepletion. ELiPSE-1 (NCT05336409) is an ongoing Phase 1, multicenter, open-label clinical trial to evaluate the safety, tolerability, pharmacokinetics, and preliminary efficacy of CNTY-101 in patients with R/R, CD19-positive B-cell malignancies.

“These interim results continue to support our belief in the potential of CNTY-101, which shows additional responses across escalating doses and different types of B-cell malignancies in heavily pretreated patients with predominantly aggressive or high-risk histologies,” said Adrienne Farid, PhD, Chief Operations Officer and Head of Early Development. “We are also encouraged by the safety profile we are seeing at higher doses, with no dose-limiting toxicities to date, after multiple treatment cycles, which we believe was achieved by leveraging our proprietary Allo-Evasion™ technology to avoid host rejection. Further, the majority of these cycles have been administered in the outpatient setting, providing additional support for CNTY-101 as a new paradigm for allogeneic cell therapies. We look forward to completing dose escalation and moving into dose expansion in the coming months.”

Interim Results from the ELiPSE-1 Study: A Phase 1, Multicenter, Open-Label Study of CNTY-101 in Subjects with Relapsed or Refractory CD19-Positive B-Cell Malignancies

Poster Board Number: 6

Session Title: Hematologic Malignancies—Lymphoma and Chronic Lymphocytic Leukemia

Session Date & Time: Monday, June 3, 2024, from 9:00 am – 12:00 pm CDT

CNTY-101 is Century's lead iNK cell therapy and the first iPSC-derived NK cell therapy engineered with six precision gene edits, featuring antigen-specific killing of CD19+ B cells, homeostatic cytokine support for enhanced persistence, Allo-Evasion™ edits to prevent rejection by the patients' immune system, and a safety switch. CNTY-101 is being assessed in heavily pre-treated relapsed or refractory NHL patients with predominantly aggressive or high-risk indolent histologies who have received two to five prior therapies, four of whom received prior CAR-T therapy. The Company previously announced initial data in December 2023, demonstrating a favorable safety profile in the initial seven patients treated with Dose Level 1 (100 million cells) and Dose Level 2 (300 million cells) on a once monthly schedule. In these low dose levels, CNTY-101 demonstrated encouraging early response signals, including two complete responses (CRs) and one partial response (PR).



As of the interim data cutoff date of March 27, 2024, preliminary safety and efficacy were evaluated across Dose Level 1, Dose Level 2 and Dose Level 3 (one billion cells) and two dosing schedules (Schedule A with single infusion, and Schedule B with three weekly infusions, per cycle). CNTY-101 infusions of up to one billion cells per cycle (as a single infusion of one billion cells, or 3 weekly infusions of 300 million cells) demonstrated a favorable safety profile with no observations of graft-versus-host disease (GVHD) or dose-limiting toxicities (DLT), and 8/12 subjects received at least one cycle of CNTY-101 in an outpatient setting. Preliminary efficacy in all evaluable patients (n=10) across dose schedules and histologies demonstrated a complete response rate (CRR) of 30% and an objective response rate (ORR) of 40% in heavily pretreated patients, with a 40% CRR and 60% ORR observed in the five patients treated with the two higher Schedule A dose levels, 300 million cells and one billion cells.

Pharmacokinetics (PK) evaluated by a novel cell-free DNA (cfDNA) method for detecting total body PK showed that CNTY-101 rapidly traffics out of circulation and persists outside the bloodstream, with AUC trending to increase with dose level. In patients who received additional cycles of CNTY-101 without lymphodepleting chemotherapy, three out of four patients had positive detection of CNTY-101 on Day 3 and beyond. The ELiPSE-1 study is currently ongoing in the dose escalation phase and is enrolling in Dose Level 3B (one billion cells in three weekly infusions per cycle), and Dose Level 4A (single infusion of 3 billion cells per cycle).

The full poster will be available on the Scientific Resources page of Century's website at the start of the poster presentation.

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 preclinically to improve functionality and persistence. Further, to address potential safety considerations, the iNK cells were engineered with an EGFR safety switch, and preclinical proof-of-concept studies have demonstrated that the cells can be quickly eliminated *in vivo* 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. The Company intends to initiate its second Phase 1 clinical trial assessing CNTY-101 in patients with moderate to severe systemic lupus erythematosus, in addition to pursuing additional regulatory filings in other prioritized autoimmune disease indications.



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 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.centuryt.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 and the initial safety and efficacy profiles of CNTY-101 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.

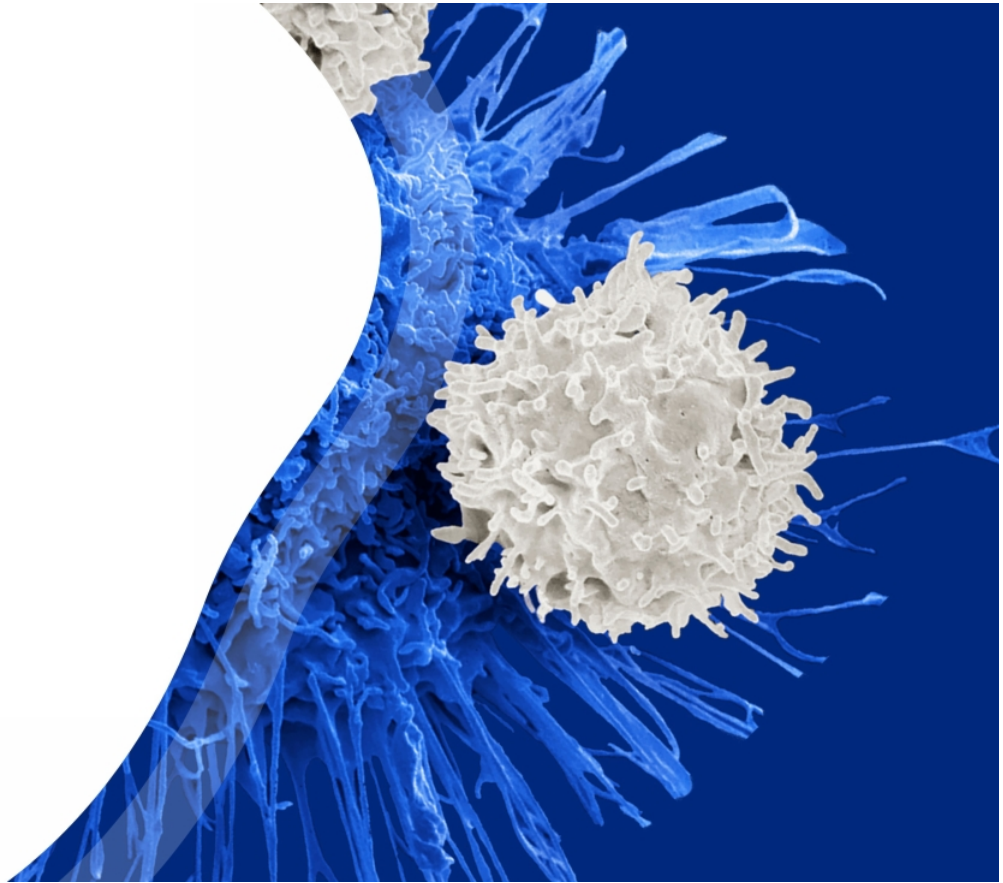
For More Information:

Investors/Media: Julie Seidel/ Noor Pahlavi – century@argotpartners.com



Corporate Overview

June 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 forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

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

LIMITLESS POTENTIAL...

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

PRECISION DESIGN...

Progressing differentiated clinical programs based on Allo-Evasion™ technology 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



Century's singular focus:

To deliver best-in-class iPSC-derived cell therapies

Century platform enables the incorporation of critical features we believe can only be 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 a master cell bank, ensuring safety and functional reproducibility of the final drug product

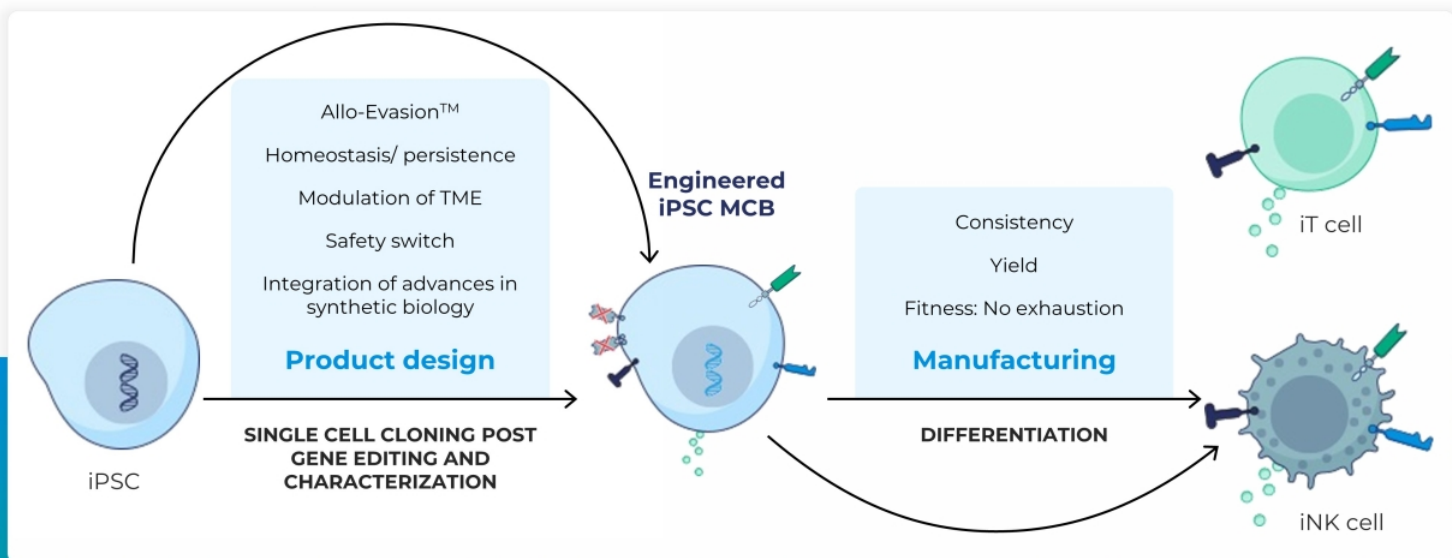
Platform capable of fully **leveraging multiple advances in synthetic biology into a single product**

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**

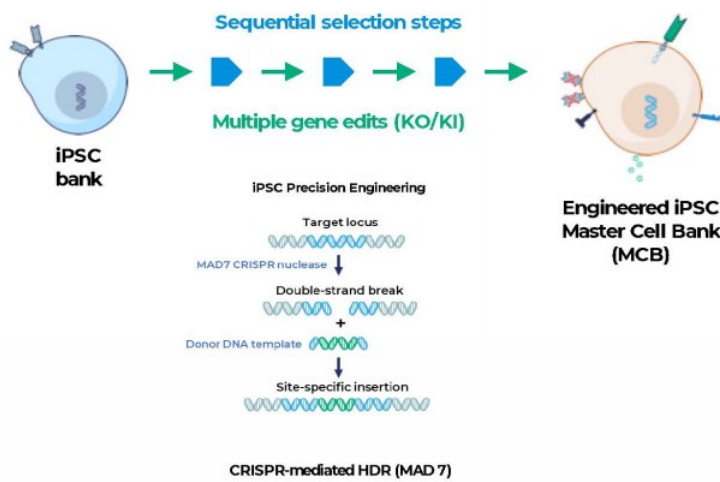
Differentiation conditions developed for **generating multiple immune effector cells**, including NK cells, CD4+ T cells (Th and Treg), CD8+ T cells, monocytes / macrophages

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**

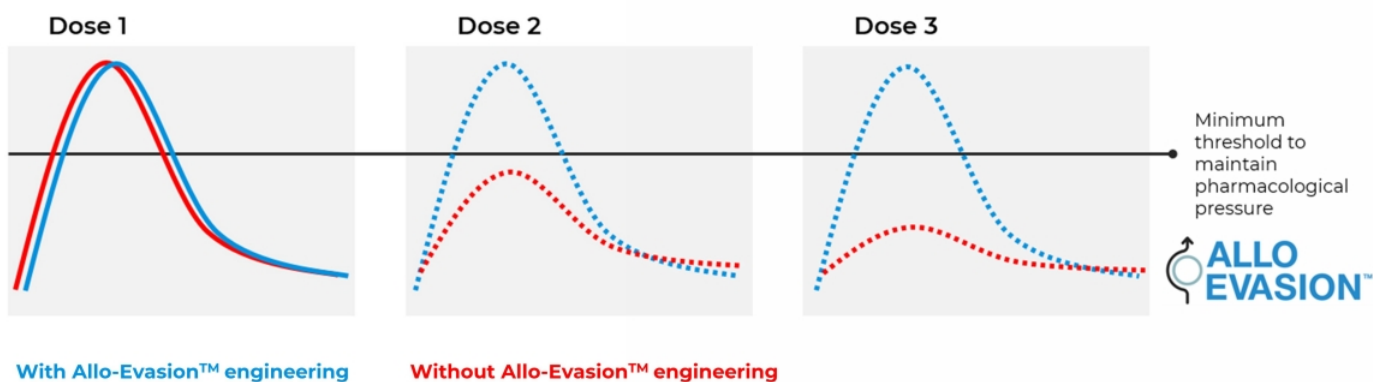
Stepwise and efficient gene editing **avoids risky multiplex modification** and structural variants

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



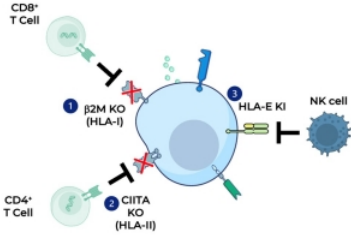
Next-wave of allogeneic cell therapies must solve for challenge of rejection

Advancing our leadership in Allo-Evasion™ technology

Continuous improvement in holistic immune protection designed to overcome major pathways of host vs. graft rejection

Allo-Evasion™ 1.0

Core edits disarm host cells from eliminating therapy



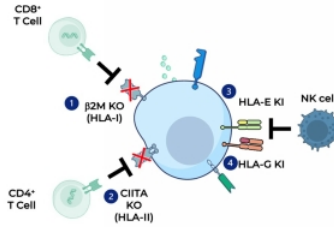
Deletion of $\beta 2M$, a protein required to express HLA-I on the cell surface prevents recognition by CD8 T cells

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

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



Allo-Evasion™ 3.0

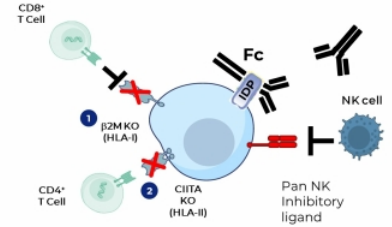


Allo-Evasion™ 1.0 edits plus the incorporation of:

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



Allo-Evasion™ 5.0



Deletion of $\beta 2M$, a protein required to express HLA-I on the cell surface prevents recognition by CD8 T 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



Foundational investments in iPSC manufacturing



Established in-house manufacturing

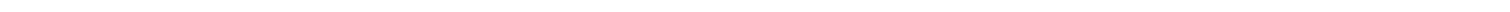
- Century 53,000 ft² GMP facility
- Designed to produce multiple immune cell types
- Accelerates learnings and enables faster product iteration
- Two sites (FCDI GMP manufacturing, Century in-house manufacturing) provide optionality and maximizes flexibility

Developing fit-for-purpose products

- Increased process and product consistency
- Scalable platforms and optimized processes to maximize yield, reduce COGs, and meet demand
- Increased 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

Product	iPSC Platform	Targets	Indications	Research	IND-Enabling	Clinical			Collaborator / Origin
						P1	P2	P3	
Autoimmune and Inflammatory Diseases									
CNTY-101	iNK	CD19	Systemic Lupus Erythematosus	CALIPSO-1		IND cleared			
			Autoimmune Diseases						
CNTY-108	iNK/ $\gamma\delta$ iT	CD19	Autoimmune Diseases						
CLDE-308	$\alpha\beta$ iT	CD19	Autoimmune Diseases						CLADE THERAPEUTICS
CLDE-361	$\alpha\beta$ iT	BCMA	Myasthenia Gravis						CLADE THERAPEUTICS
Hematologic and Solid Tumors									
CNTY-101	iNK	CD19	B-Cell Malignancies	ELIPSE-1					
CNTY-102	iNK/ $\gamma\delta$ iT	CD19 + CD22	B-Cell Malignancies						
CLDE-308	$\alpha\beta$ iT	CD19	B-Cell Malignancies						CLADE THERAPEUTICS
CNTY-104	iNK/iT	Multi-specific	AML						Bristol Myers Squibb
CNTY-106	iNK/iT	Multi-specific	MM						Bristol Myers Squibb
CNTY-107	$\gamma\delta$ iT	Nectin-4	Solid Tumors						
Research	iT	Not disclosed	Solid Tumors						CLADE THERAPEUTICS
Research	iNK/iT	TBD	Hematologic and Solid Tumors						

● Autoimmune and Inflammatory Diseases ● Hematologic Tumors ● Solid Tumors

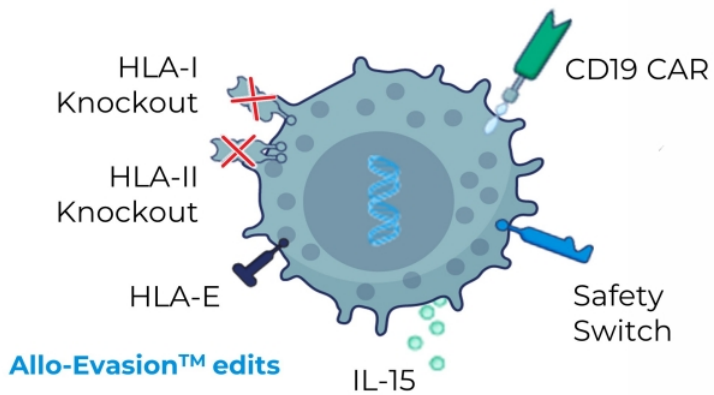


CNTY-101 Clinical Programs

CNTY-101: Differentiated next-gen CD19 targeted product

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

CNTY-101



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:

- 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
- 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

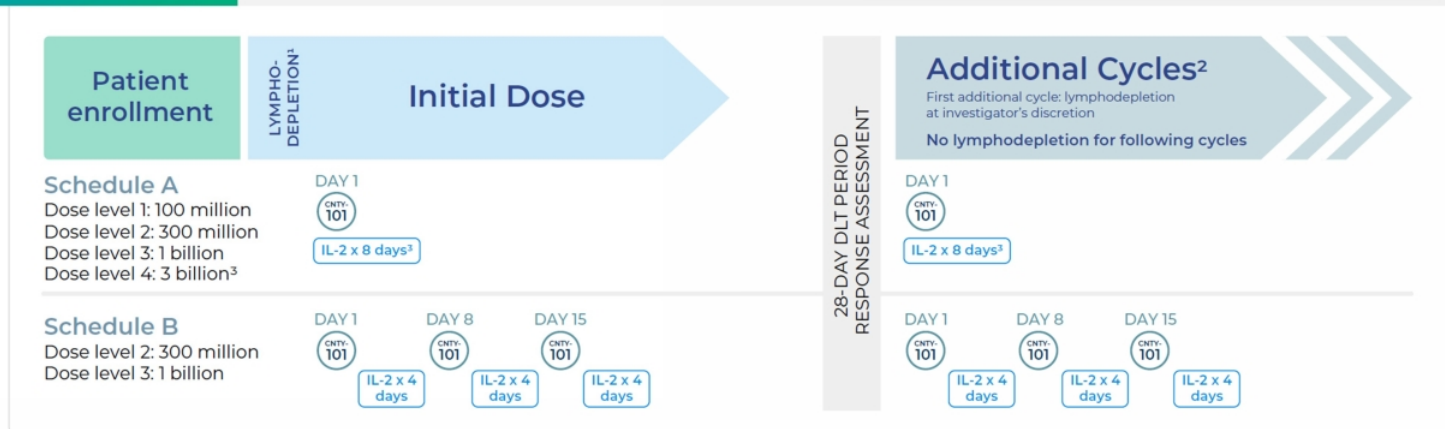
R/R: Relapsed or Refractory, NHL: Non-Hodgkin Lymphoma, CAR-T: Chimeric Antigen Receptor T cell therapy
¹Cappell, Nature Reviews Clinical Oncology (2023)

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

Patients with CD19+ aggressive and high-risk indolent R/R B-NHL

- DLBCL, HGBL, MCL, PMBCL, FL3B, FL, MZL
- ≥ 2 prior lines of therapy
- Prior CD19-targeted cell therapy allowed

- Part 1 – Dose escalation
 - Schedule A: single dose
 - Schedule B: 1 dose per week x 3 weeks
- Part 2 – Dose expansion



¹Standard lymphodepletion regimen: fludarabine (30 mg/m/d) and cyclophosphamide IV (300 mg/m/d) for 3 days
²Subjects who are assessed as stable disease or better may receive additional cycles of CNTY-101
³Subjects at DL4A did not receive IL-2 on the day of CNTY-101 infusion but did receive daily for 7 days

BOIN: Bayesian Optimal Interval,
 DLT: Dose Limiting Toxicity;
 IL-2: Interleukin-2 (dose: 3e6 IU; subcutaneous)

**ELIPSE-1
enrolled
heavily
pre-treated
R/R B-NHL
patients
across 7 sites**

Baseline characteristics	N=12 safety evaluable ¹
Median age (range, years)	70 (60-76)
Male, n (%)	9 (75)
NHL subtype, n (%)	
• DLBCL	7 (58)
• HRFL	1 (8)
• MCL	2 (17)
• MZL	2 (17)
Prior therapies, median (range)	4 (2-5)
Response to last line of treatment, n (%)	
• Relapsed	3 (25)
• Refractory	9 (75)
Received prior autologous* CAR-T, n (%)	3 (25)
• If no, why	
– Manufacturing fail	1
– Not eligible	3
– Not willing to wait	4 ²
– Financial or reimbursement constraints	1

*4 subjects received prior CAR T (3 autologous and 1 allogeneic)

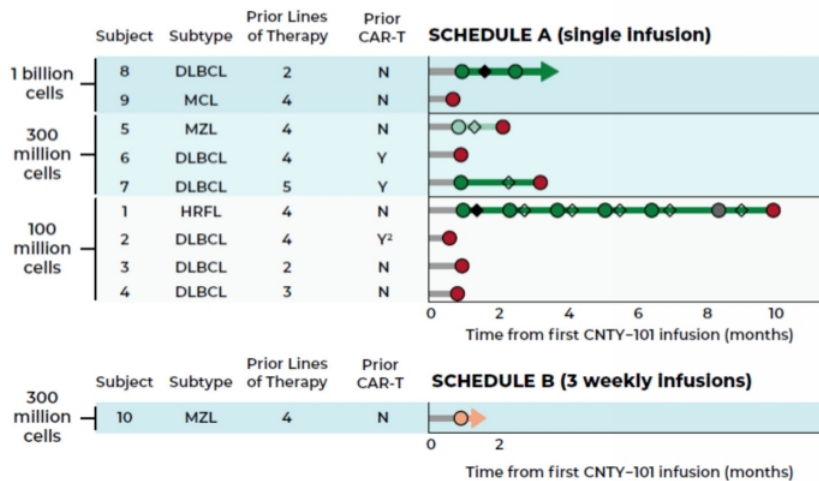
¹ As of 27 March 2024 data cutoff, data collection ongoing

² One subject received allogeneic CAR-T

HRFL: High-risk follicular lymphoma; DLBCL: Diffuse large B cell lymphoma;
MZL: Marginal zone lymphoma; MCL: Mantle cell lymphoma

CNTY-101 preliminary clinical data

Favorable safety profile and encouraging efficacy across initial dose levels studied



● CR ● PR ● SD ● PD ● NE ◆ Dose (with LDC) ◇ Dose (no LDC)

HRFL: High-risk follicular lymphoma MZL: Marginal zone lymphoma
DLBCL: Diffuse large B cell lymphoma MCL: Mantle cell lymphoma

Efficacy (n=10)

- 30% CRR and 40% ORR across all dose levels and histologies
- 40% CRR and 60% ORR at highest studied dose levels in Schedule A

Safety & Tolerability (n=12)

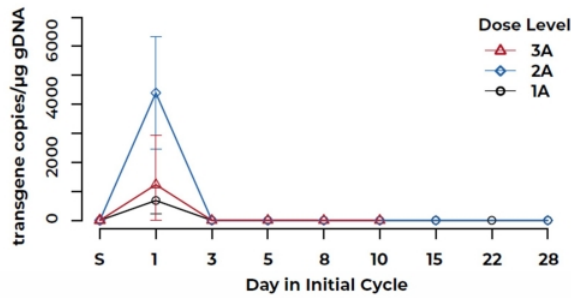
- No treatment discontinuations due to AES; no GvHD
- CRS: Grade 1 (N=2), Grade 2 (N=2)
 - Hypotension (n=1) and hypoxia (n=1) lasted <24hrs
- ICANS: Grade 1 (N=1), resolved in <24hrs

¹As of 27 March 2024 data cutoff date, data collection ongoing, efficacy based on Lugano criteria
²Subject received prior allogeneic CAR-T
CRR: Complete Response Rate, LDC: Lymphodepleting Chemotherapy, ORR: Overall Response Rate

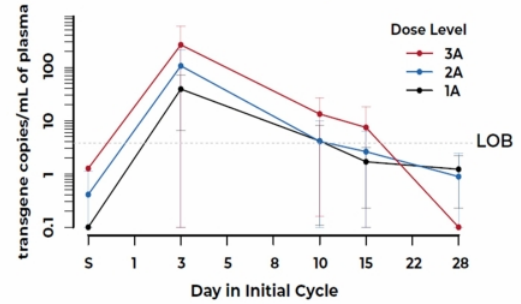
CNTY-101 emerging pharmacokinetic profile

- CNTY-101 has limited duration in circulation
- CNTY-101 persistence is detected via a novel cell-free (cf) DNA assay on Day 3 and beyond
- CNTY-101 cfDNA AUC trending to increase with dose
- 3/4 pts who received an additional CNTY-101 cycle without LD had CNTY-101 cfDNA detected at Day 3+

PBMC genomic DNA



Plasma cell-free DNA¹



Data is shown as mean \pm SD for the initial cycle across subjects at each dose level in Schedule A as of May 1st, 2024 data cutoff date.

cfDNA: Cell-free DNA, LD: Lymphodepletion
Ramachandran, et al. 2023 ASH Annual Conference

¹Cell-free DNA has short half-life in circulation, ranging from minutes to hours
(Khier and Lohan, Future Science 2018)

ASH 2023 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 Patel⁶

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



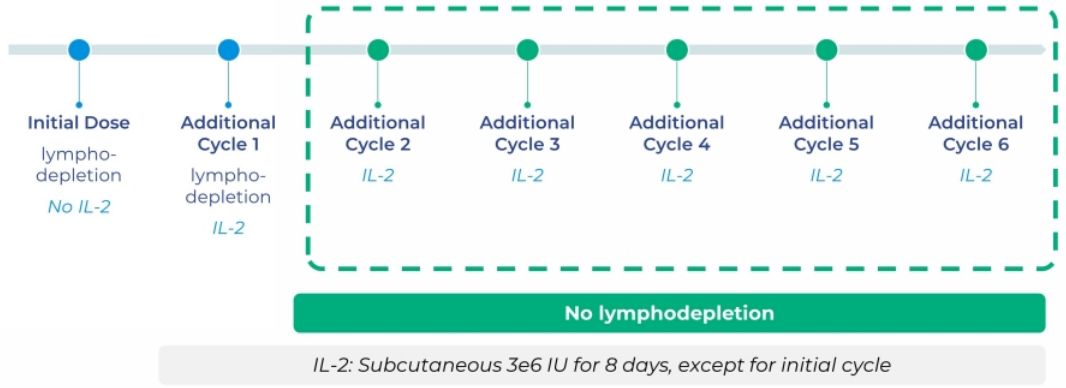
Sex/Age: Female/63

Tumor Subtype: Follicular Lymphoma

Dose/Schedule: 100e6 cells x 1 per cycle (Dose Level 1; Schedule A)

Prior Therapy:

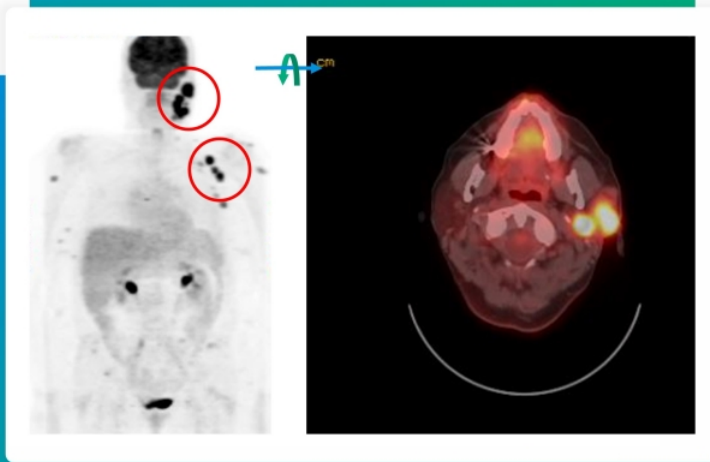
- 4 prior lines of therapy including anti-CD20, bispecific, and investigational therapy
- High-risk R/R - Relapsed within 12 months of starting R-CHOP



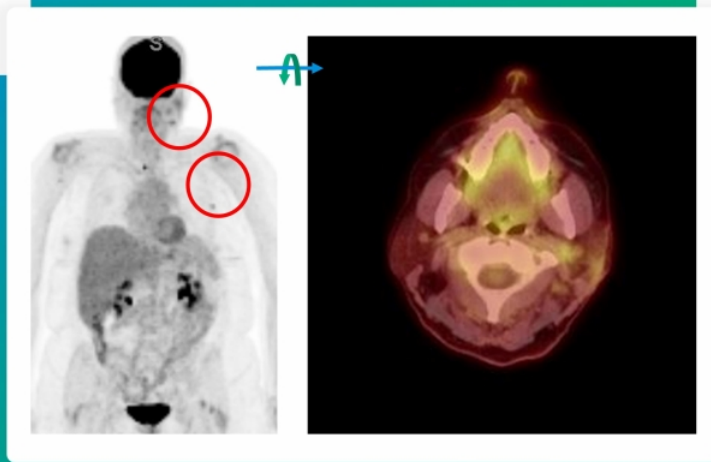
*Data cutoff date of November 13, 2023; represents data verified post data cut
 †Patient subsequently progressed
 Ramachandran, et al. 2023 ASH Annual Conference

ASH 2023 case study: Early evidence of anti-lymphoma activity with durable 6-month complete response[^]

Baseline



Post-initial dose (Day 28)

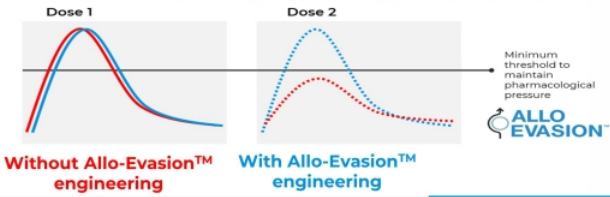


[^]Patient subsequently progressed
Ramachandran, et al. 2023 ASH Annual Conference

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)

Allo-Evasion™ edits + repeat dosing without the need for LD



Allo-Evasion™ provides potential for more tightly control drug exposure to enable sustained pressure on the target

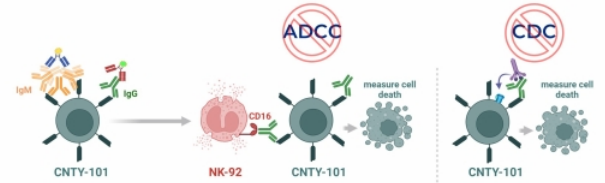
ELIPSE-1 Clinical Data

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

Initial Cycle	No LD						p value	
	AC1	AC2	AC3	AC4	AC5	AC6		
DAY 3	not collected	30 [+]	16 [+]	24 [+]	21 [+]	30 [+]	19 [+]	
DAY 10	not collected	3 [+]	6 [+]	3 [+]	0 [-]	not collected	not collected	
DAY 15	not collected	2 [-]	not collected	2 [-]	1 [-]	not collected	2 [-]	
DAY 28	6 [+]	2 [-]	6 [+]	2 [-]	2 [-]	1 [-]	3 [+]	

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

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 initial 3 dose levels in Schedule A



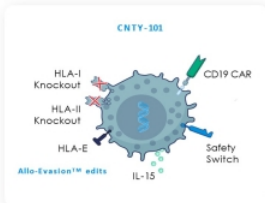
Novel cfDNA assay enables monitoring of CNTY-101 persistence in extravascular space; AUC increase trending with dose



Initial data for CNTY-101 supports the potential for Allo-Evasion™ to enable a multi-dosing regimen without the need for continued lymphodepletion

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

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
- Ph1 CALiPSO-1 trial in SLE initiating in H1 2024

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

Allogeneic

- Available “off-the-shelf”
- No patient apheresis required
- No manufacturing wait time
- Platform enables lower COGs than donor-derived or autologous

NK cells

- Killing potency \geq primary CAR-T
- Trafficking to secondary lymphoid tissues and marrow favors pathogenic B-cell targeting
- Limited *in vivo* expansion

Allo-Evasion™

- 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

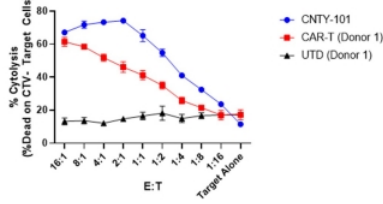
CNTY-101: Potential to drive B-cell depletion with tighter control over drug exposure

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

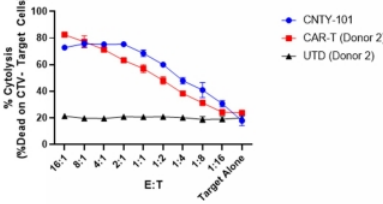
CNTY-101 more potent than primary CAR-T cells at B-cell killing at 24 hours in preclinical comparison

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

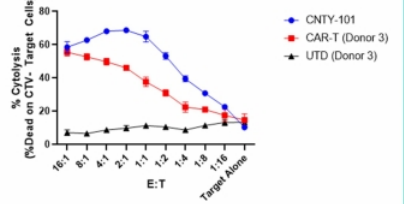
Healthy Donor 1 % Cytolysis (CTV- Dead Cells)



Healthy Donor 2 % Cytolysis (CTV- Dead Cells)

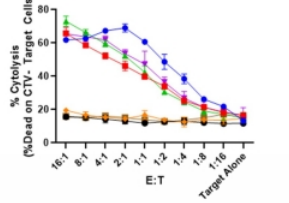


Healthy Donor 3 % Cytolysis (CTV- Dead Cells)

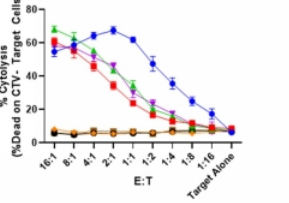


CNTY-101 & CAR-Ts from Healthy Donors on B Cells Isolated from SLE Patients

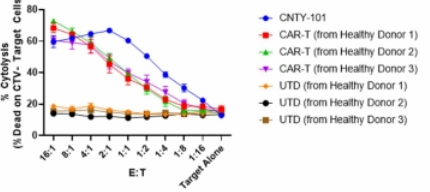
SLE Donor 1 % Cytolysis (CTV- Dead Cells)



SLE Donor 2 % Cytolysis (CTV- Dead Cells)



SLE Donor 3 % Cytolysis (CTV- Dead Cells)



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



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 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 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

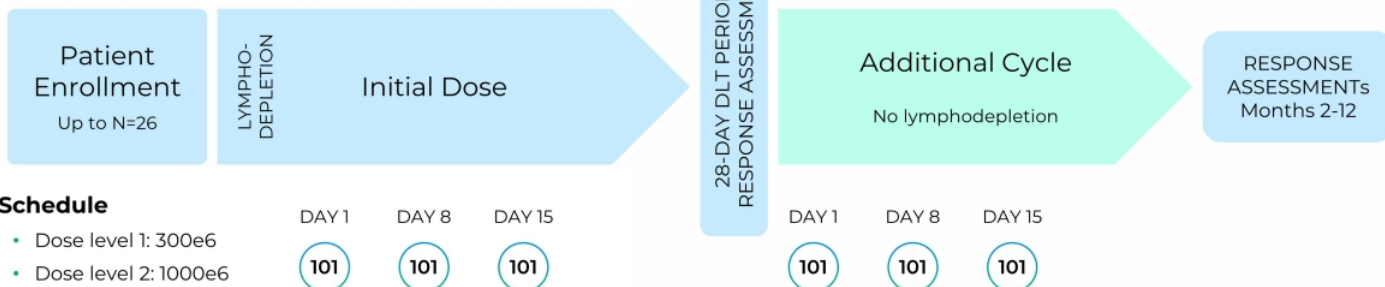
CNTY-101: CALiPSO-1 systemic lupus erythematosus Phase 1 study

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

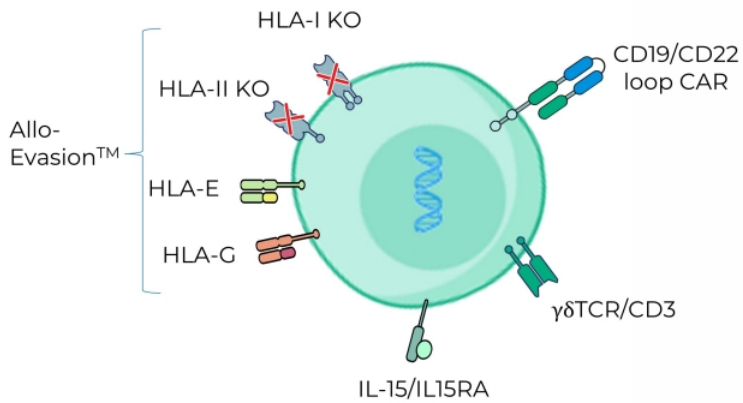


Discovery Programs



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

CNTY-102



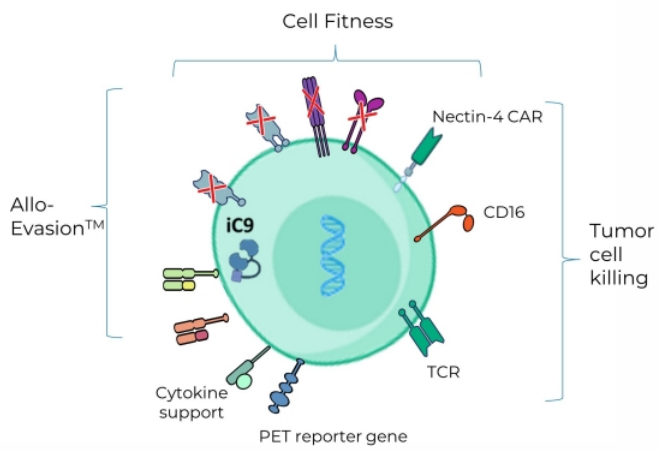
Illustrative construct

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

- iNK and $\gamma\delta$ iT 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



Illustrative construct

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



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 announced; completion of dose escalation and progression into dose expansion in 2024

Phase 1 CALIPSO-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 filing submissions for CNTY-101 in 2H 2024

CASH RESOURCES

Cash runway into 2026

Ended 1Q24 with cash, cash equivalents, and investment of \$249.9M

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

LIMITLESS POTENTIAL...

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

PRECISION DESIGN...

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

ENDURING IMPACT...

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