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): March 14, 2024

Century Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**001-40498**	**84-2040295**
(State or other jurisdiction of incorporation or organization)	(Commission File Number)	(I.R.S. Employer Identification No.)

25 North 38th Street, 11th Floor **Philadelphia, Pennsylvania**	**19104**
(Address of principal executive offices)	(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 2.02 Results of Operations and Financial Condition

On March 14, 2024, Century Therapeutics, Inc. (the "Company") issued a press release announcing its financial results for the year ended December 31, 2023. 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.

The information contained in this Item 2.02 (including Exhibit 99.1) is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section and shall not be deemed to be incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Item 7.01 Regulation FD Disclosure

On March 14, 2024, 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.

The information contained in this Item 7.01 (including Exhibit 99.2) is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities of that section and shall not be deemed incorporated by reference in any filing under the Securities Act or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

Exhibit No.	Document
99.1	Press Release of Century Therapeutics, Inc., dated March 14, 2024
99.2	Investor Presentation of Century Therapeutics, Inc., dated March 14, 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: March 14, 2024

Exhibit 99.1

Century Therapeutics Reports Full Year 2023 Financial Results and Provides Business Updates

- Presented initial data from Phase 1 ELiPSE-1 Trial of CNTY-101 in relapsed/refractory B-cell lymphomas demonstrating a favorable tolerability profile, early clinical activity and indication that Allo-Evasion™ may support a multi-dosing regimen without the need for continued lymphodepletion -

- Received investigational new drug (IND) clearance for CNTY-101 for the treatment of systemic lupus erythematosus (SLE); On track to initiate Phase 1 CALiPSO-1 clinical trial in the first half of 2024 -

- Six posters to be presented at upcoming AACR Annual Meeting 2024 highlighting Century's end-to-end cell therapy capabilities including expertise across iPSC reprogramming, gene editing, protein engineering, Allo-Evasion™ technology and computational biology -

- Ended 2023 with cash, cash equivalents, and investments of $261.8 million; Cash runway into 2026 -

PHILADELPHIA, March 14, 2024 -- Century Therapeutics, Inc. (NASDAQ: IPSC), an innovative biotechnology company developing induced pluripotent stem cell (iPSC)-derived cell therapies in immuno-oncology and autoimmune and inflammatory disease, today reported financial results and business highlights for the full year ended December 31, 2023.

"We enter 2024 following a series of significant milestones, highlighted by our presentation at ASH showcasing promising initial data from our ELiPSE-1 trial of CNTY-101. These findings not only revealed encouraging tolerability and early response signals in treating r/r B-cell lymphomas, but also unveiled the potential for a multi-dosing strategy while avoiding the need for continued lymphodepletion," said Brent Pfeiffenberger, Pharm.D., Chief Executive Officer of Century Therapeutics. "The early success of our Allo-Evasion^{TM} technology, demonstrated by the recent ELiPSE-1 data, bolsters our confidence in the potential of this approach for prolonged and tighter control over drug exposure as we anticipate expansion into autoimmune indications, marked by the recent IND clearance of CNTY-101 in SLE. We believe Century remains at the forefront of pioneering allogeneic cell therapy technology, exemplified by the early clinical activity of CNTY-101 in the ELiPSE-1 trial, the first clinical cell therapy candidate to be engineered with six precision gene edits for enhanced selectivity and persistence, and continued progress across our discovery and pipeline programs leveraging our integrated capabilities."

Research and Development Highlights and Upcoming Milestones

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 in Century's preclinical studies 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 (FDA) for certain cancers.

- In December 2023, Century presented initial clinical data from the Phase 1 ELiPSE-1 Trial of CNTY-101 in relapsed/refractory (r/r) B-cell lymphomas. Findings supporting the potential for a multi-dosing strategy for CAR iNK enabled by Allo-Evasion™ edits were shared at the 65th American Society of Hematology (ASH) Annual Meeting. Data showed that CNTY-101 was well-tolerated at Dose Level 1 (100 million cells) in high-risk, heavily pretreated R/R B-cell lymphoma patients. The Company also shared a case study of one patient demonstrating a six-month durable complete response (CR) following multiple cycles of CNTY-101 without lymphodepletion.

- In December 2023, Century also shared results from additional patients in the ELiPSE-1 clinical trial of CNTY-101 treated at Dose Level 1, as well as preliminary data from patients treated at Dose Level 2 (300 million cells) demonstrating encouraging early response signals, including 2 CRs and 1 partial response (PR) out of 7 heavily pre-treated patients at these dose levels. CNTY-101 also demonstrated a favorable tolerability profile and no initial evidence of allo-rejection. The Company believes these results support advancement to higher doses and a more dose intense regimen. The ability to prolong drug exposure by repeat dosing may provide significant treatment advantages in lymphoma, including enhanced objective response rates and duration of response.

- In December 2023, the Company received FDA clearance for the Investigational New Drug (IND) application of CNTY-101 in patients with moderate to SLE who have failed at least two standard immunosuppressive therapies. This represents the second IND clearance for CNTY-101 and the first in an autoimmune and inflammatory disease indication. Century plans to initiate a Phase 1 clinical trial, CALiPSO-1, in the first half of 2024, with initial data expected by year-end 2024.

- Century plans to share six poster presentations at the 2024 American Association for Cancer Research (AACR) Annual Meeting being held on April 5-10, 2024, in San Diego, California, showcasing Century's recent research in enhancing the safety and efficacy of its iPSC-derived treatment candidates for oncology and immunology indications. The upcoming abstracts highlight the Company's end-to-end capabilities in iPSC reprogramming and differentiation, gene editing, protein engineering and computational biology. Additionally, the Company will share new preclinical data on additional Allo-Evasion™ edits that could further support Century's multi-dosing strategy. The following abstracts are currently available through the AACR conference website, and the posters will be made available on the Century website following the presentations:

  - Engineered Expression Of HLA-E And HLA-G Protects iPSC-Derived Cells from Killing by Primary NK Cells

  - CXCR4 Transgene Improves In Vivo Migration and Efficacy of Engineered iPSC-Derived Natural Killer Cells

  - Screening iPSC Lines for Optimal Characteristics of Differentiation into Immune Effector Cells for Clinical Programs

  - Discovery of a Novel Nectin-4 iPSC-derived Cell Therapy for the Treatment of Solid Tumors

  - The Discovery of a Novel CD19xCD22 Dual-Targeting CAR For the Development of an iPSC-Derived Cell Therapy

  - Discovery Of Inhibitory CAR Target DSG1 For Damping Nectin-4 On-Target Off-Tumor Toxicity in iPSC-Derived CAR-T Cell Therapy

Business Highlights

- In November 2023, the Company announced the appointment of Brent Pfeiffenberger, Pharm.D., MBA, as Chief Executive Officer.
- In November 2023, Century and FUJI Cellular Dynamics (FCDI) announced a worldwide license agreement where FCDI granted Century non-exclusive licenses for the development and commercialization of cell therapies derived from iPSCs for the treatment of autoimmune and inflammatory diseases. Additionally, they announced the expansion of their existing 2018 license agreements for iPSC-derived cancer immunotherapeutics.

Full Year 2023 Financial Results

- **Cash Position:** Cash, cash equivalents, and marketable securities were $261.8 million as of December 31, 2023, as compared to $367.4 million as of December 31, 2022. Net cash used in operations was $88.3 million for the twelve months ended December 31, 2023, compared to net cash provided by operations of $14.1 million for the twelve months ended December 31, 2022 (which includes deferred revenue from the Bristol Myers Squibb (BMS) collaboration of $118.0 million).
- **Collaboration Revenue:** Collaboration revenue generated through the Company's collaboration, option, and license agreement with Bristol-Myers Squibb (BMS) was $2.2 million for the year ended December 31, 2023, compared to $5.2 million for the same period in 2022.
- **Research and Development (R&D) expenses**: R&D expenses were $92.7 million for the year ended December 31, 2023, compared to $97.2 million for the year ended December 31, 2022. The decrease in R&D expenses was primarily due to the Company's 2023 reorganization and reprioritization of early-stage programs and discovery platforms as well as a decline in sponsored research activities.
- **General and Administrative (G&A) expenses:** G&A expenses were $34.7 million for the year ended December 31, 2023, compared to $31.9 million for the year ended December 31, 2022. The increase in G&A expenses was primarily due to increases in stock-based compensation and recruiting fees.
- **Impairment of Long-lived Assets:** A one-time impairment charge of $16.4 million was recorded in connection with the strategic decision to consolidate three of the Company's existing leased facilities in Philadelphia as well as one in Seattle.
- **In-Process Research and Development:** In-process research and development expenses were $5.0 million for the year ended December 31, 2023, compared to $10.0 million for the year ended December 31, 2022. In 2023, $4.0 million was a result of entering into a worldwide license agreement with FCDI for the development and commercialization of iPSC-derived therapies for treatment of inflammatory and autoimmune diseases, and $1.0 million related to a milestone fee paid pursuant to the license for filing of the IND for CNTY-101 in SLE.
- **Net Loss**: Net loss was $136.7 million for the year ended December 31, 2023, compared to $131.0 million for the year ended December 31, 2022.

Financial Guidance

- The Company expects full year generally accepted accounting principles (GAAP) operating expenses to be between $135 million and $145 million.
- The Company estimates its cash, cash equivalents, and investments will support operations into 2026.

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.

Forward-Looking Statements

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 financial guidance, 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 and media: Julie Seidel/ Noor Pahlavi – century@argotpartners.com

Century Therapeutics, Inc
Condensed Balance Sheets
(unaudited, in thousands)

	December 31, 2023	December 31, 2022
Assets		
Current Assets:		
Cash and cash equivalents	$ 47,324	$ 84,265
Short-term investments	125,414	231,233
Prepaid expenses and other current assets	4,256	4,223
Total current assets	176,994	319,721
Property and equipment, net	71,705	82,785
Operating lease right-of-use assets, net	20,376	28,945
Long-term investments	89,096	51,854
Other long-term assets	2,520	3,239
Total assets	$ 360,691	$ 486,544
Liabilities, convertible preferred stock, and stockholders' equity		
Current liabilities:		
Accounts payable	$ 2,741	$ 5,454
Accrued expenses and other liabilities	10,733	10,707
Long-term debt, current	-	6,502
Deferred revenue, current	4,372	7,154
Total current liabilities	17,846	29,817
Operating lease liability, noncurrent	46,658	38,698
Long-term debt, net	-	3,739
Other long-term liabilities	56	718
Deferred revenue	111,381	110,834
Total liabilities	175,941	183,806
Stockholders' equity		
Common stock	6	6
Additional paid-in capital	840,407	824,292
Accumulated deficit	(655,771)	(519,098)
Accumulated other comprehensive loss	108	(2,462)
Total stockholders' equity	184,750	302,738
Total liabilities and stockholders' equity	$ 360,691	$ 486,544

Century Therapeutics, Inc
Condensed consolidated statements of operations
(unaudited, in thousand, except share and per share amounts)

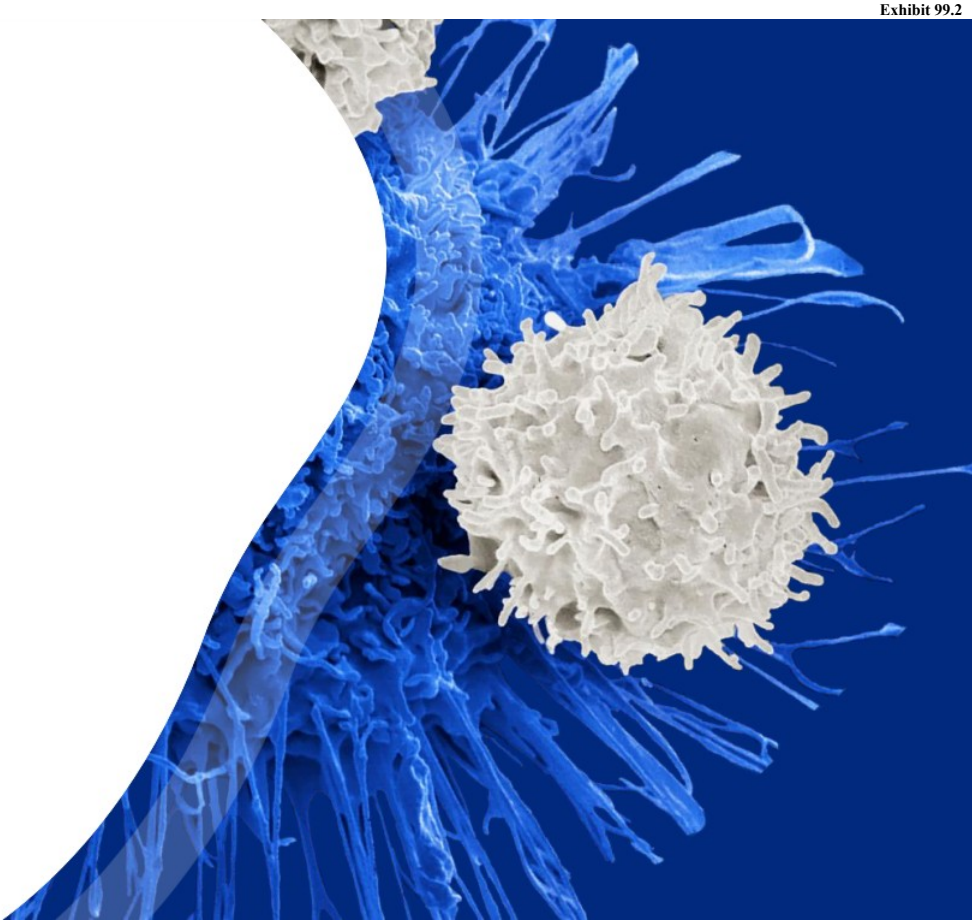
	Nine months Ended	
	December 31, 2023	December 31, 2022
Collaboration Revenue	$ 2,235	$ 5,199
Operating Expenses		
Research and development	$ 92,710	$ 97,173
General and administrative	34,706	31,857
In-process research and development	5,000	10,000
Impairment on long-lived assets	16,365	-
Total operating expenses	$ 148,781	$ 139,030
Loss from operations	(146,546)	(133,831)
Interest expense	(540)	(1,430)
Interest income	12,677	4,420
Other income, net	(383)	-
Loss before provision for income taxes	$ (134,792)	$ (130,841)
Provision for income taxes	(1,881)	(91)
Net Loss	$ (136,673)	$ (130,932)
Unrealized gain (loss) on investments	2,602	(1,786)
Foreign currency translation adjustment (loss)	(32)	(26)
Comprehensive loss	(134,103)	(132,744)
Net loss per common share - Basic and Diluted	(2.30)	(2.27)
Weighted average common shares outstanding	59,314,389	57,755,842

Exhibit 99.2

CENTURY THERAPEUTICS

Corporate Overview

March 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 o 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 the COVID-19 pandemic, geopolitical issues and inflation on our business and operations supply chain and labor force; the performance of third parties in connectio 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 enfo 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 forwa looking statements. Moreover, we operate in a dynamic industry and economy. New risk factors and uncertainties may emerge from time to tim 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 d not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future event changed circumstances or otherwise.

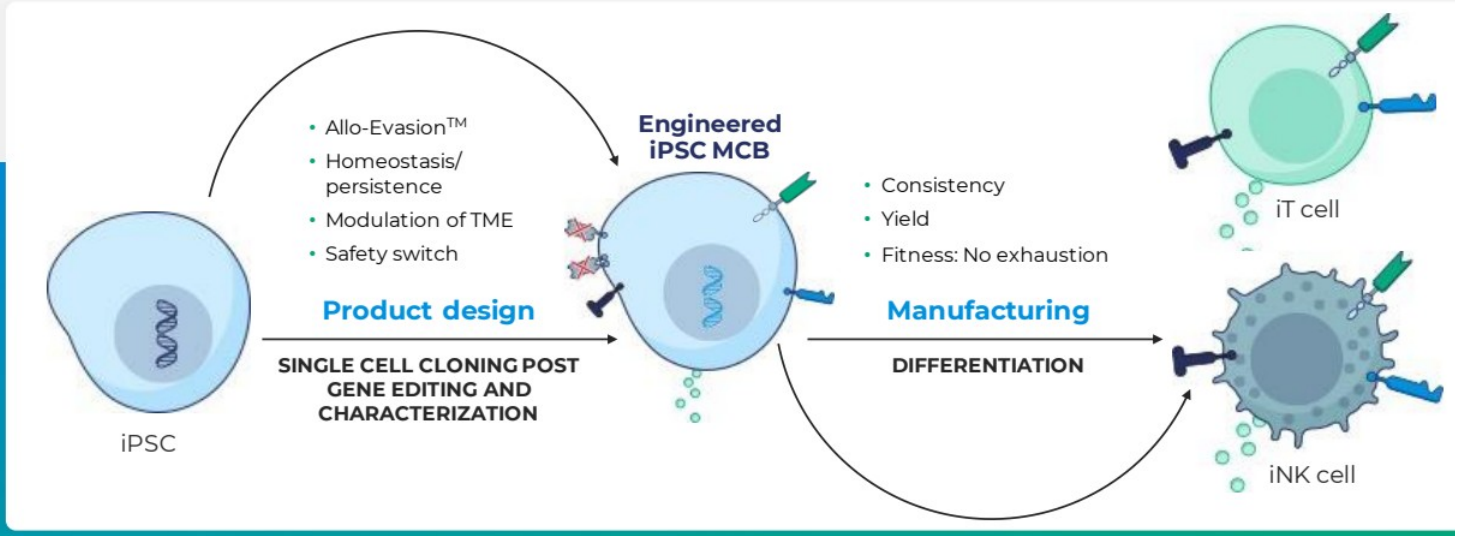
CENTURY THERAPEUTICS

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

CENTURY THERAPEUTICS


CENTURY
THERAPEUTICS
Overview of Foundational
Platform Technologies

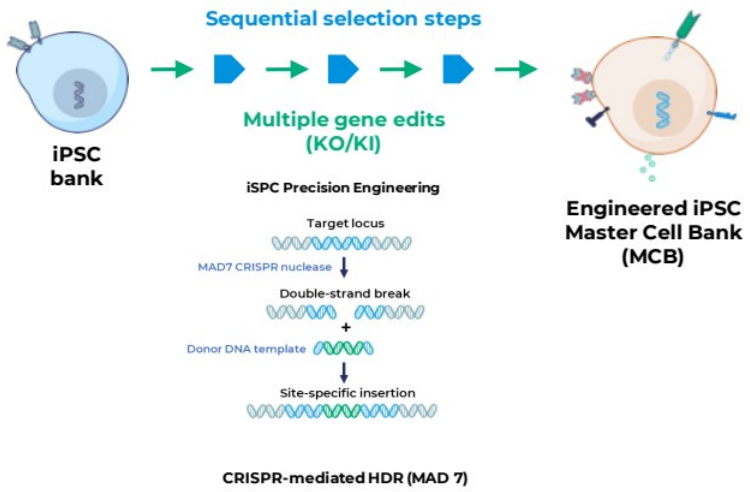
Versatility and unprecedented control: Century's next-generation allogeneic iPSC technology platform



Iterative optimization of product functionality and manufacturability

CENTURY THERAPEUTICS

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



Advantages of Century's Platform

Precise CRISPR mediated homology directe repair reduces off-target integration

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

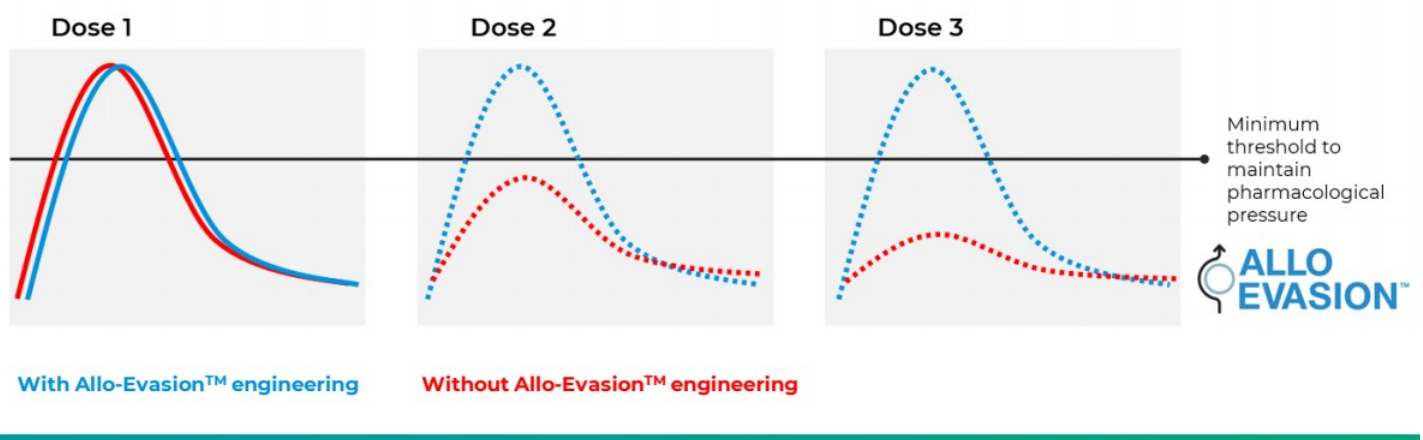
Quality control through generation of homogenous MCB establishes genomic product **integrity**

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

CENTURY THERAPEUTICS

Potential to drive durable responses with engineering to resist immune rejection

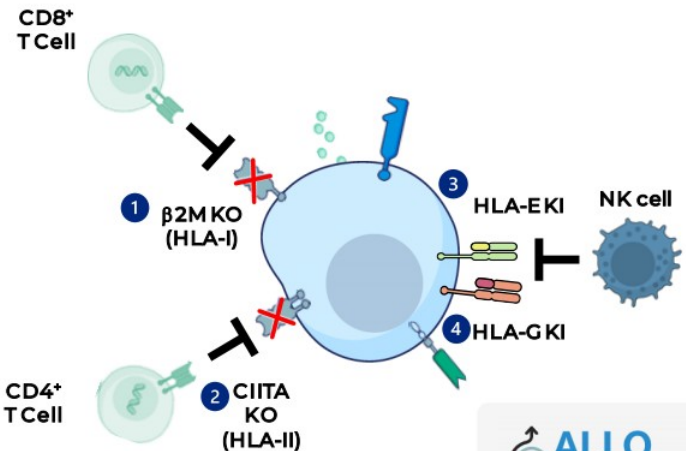
Allo-Evasion™ edits + repeat dosing = potential greater durability



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

CENTURY THERAPEUTICS

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



ALLO EVASION™

Core edits disarm host cells from eliminating therapy

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

Allo-Evasi 1.0

Allo-Eva 3.0

CENTURY THERAPEUTICS

Foundational investments in iPSC manufacturing

Established in-house manufacturing

- Accelerates learnings and enables faster product iteration
- 53,000 ft^2 facility
- Designed to produce multiple immune cell types
- Two sites (FCDI GMP manufacturing, Century in-house manufacturing) provide optionality and maximizes flexibility

Developing fit-for-purpose products

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

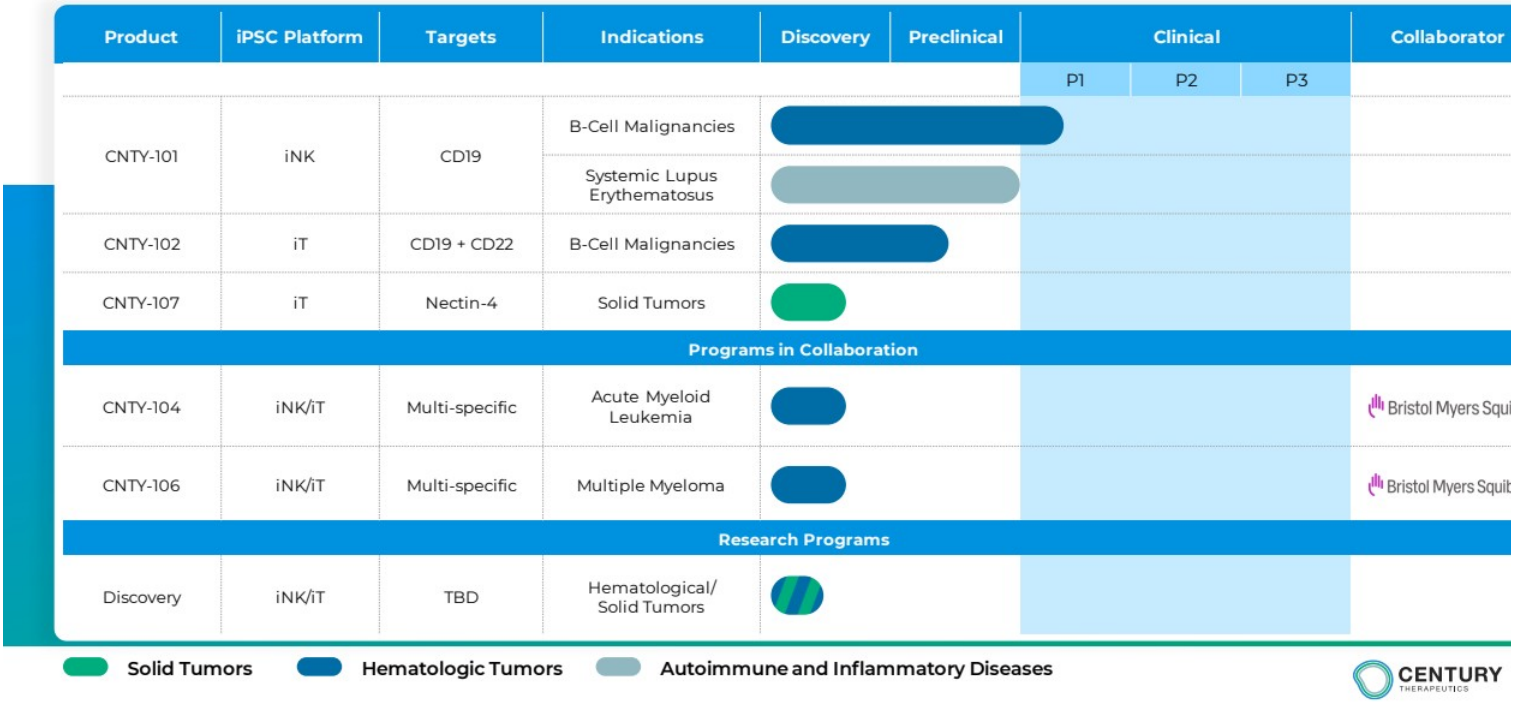
CENTURY THERAPEUTICS

CENTURY THERAPEUTICS

Pipeline

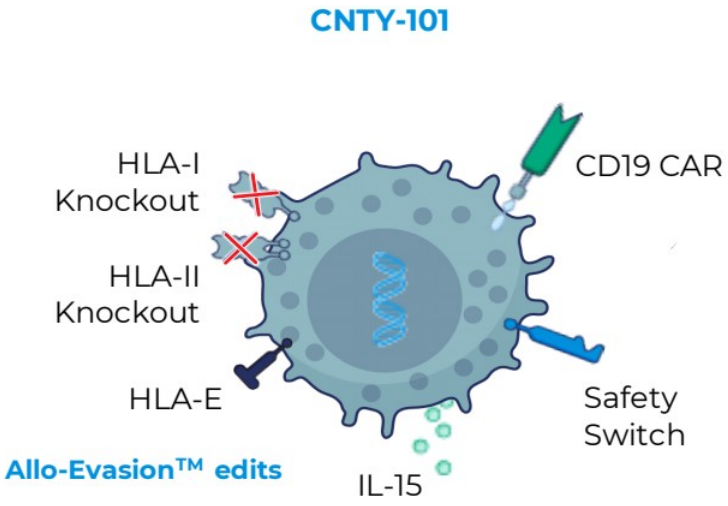
Diversified pipeline

Product candidates spanning cell platforms and targets in solid and hematologic cancers and autoimmune and inflammatory diseases




CENTURY
THERAPEUTICS
CNTY-101 Clinical Programs

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 durabilit benefit of repeat dosing enabled by Allo-Evasion™ edits

CENTURY THERAPEUTICS

CNTY-101 in relapsed/refractory B-cell lymphomas

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

Unmet need:	Potential solution from Century's platform:
• Autologous CD19 CAR-T is curative in 40 percent 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	• 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

CENTURY THERAPEUTICS

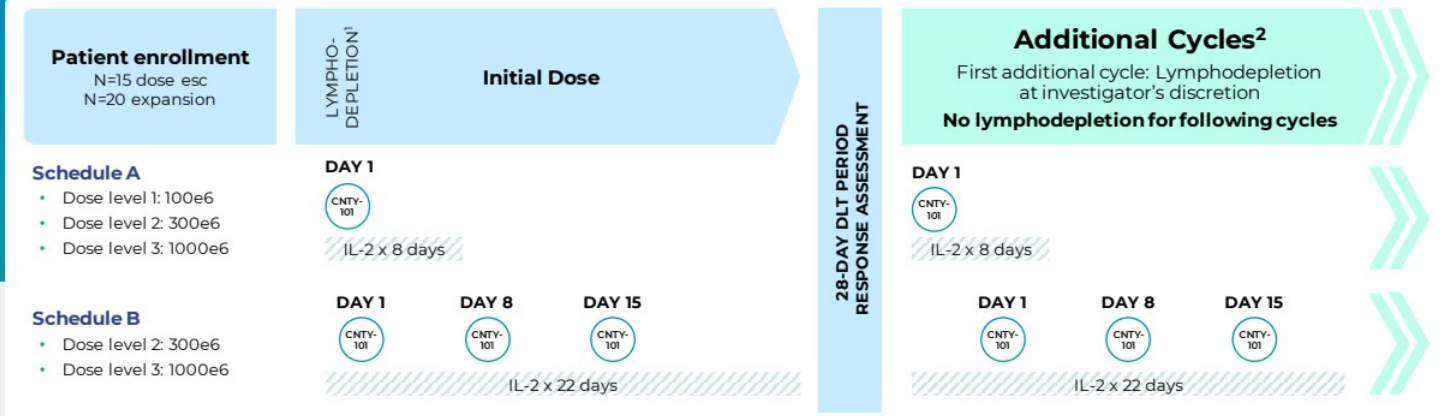
CNTY-101: ELiPSE-1 (NCT05336409) Phase 1 BOIN design

Inclusion:

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

Endpoints:

- Primary: MTD based on DLTs; RP2R
- Key Secondary: Safety, tolerability, Efficacy (ORR, CRR, DoR), P
- 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

CENTURY THERAPEUTICS

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

CENTURY THERAPEUTICS

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

CENTURY THERAPEUTICS

ELiPSE-1: Favorable initial safety profile

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

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

CENTURY THERAPEUTICS

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

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

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

CENTURY THERAPEUTICS

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

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

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

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

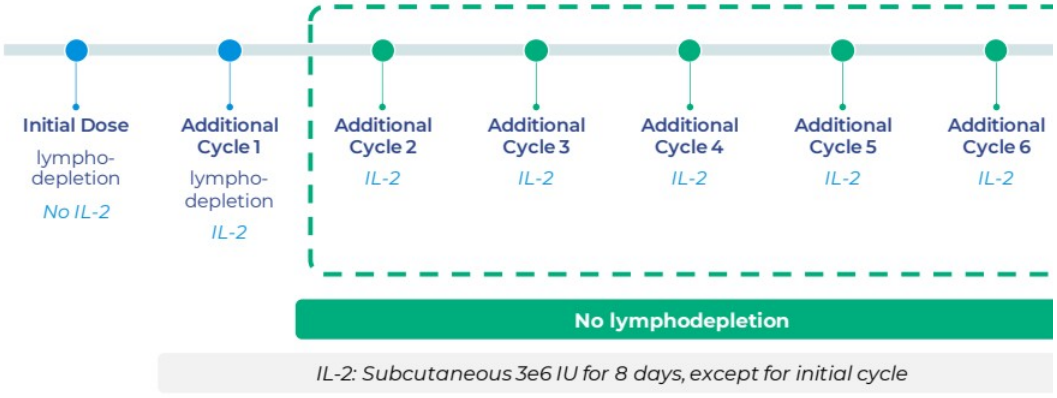
Sex/Age: Female/63

Tumor Subtype: Follicular Lymphoma

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

Prior Therapy:

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



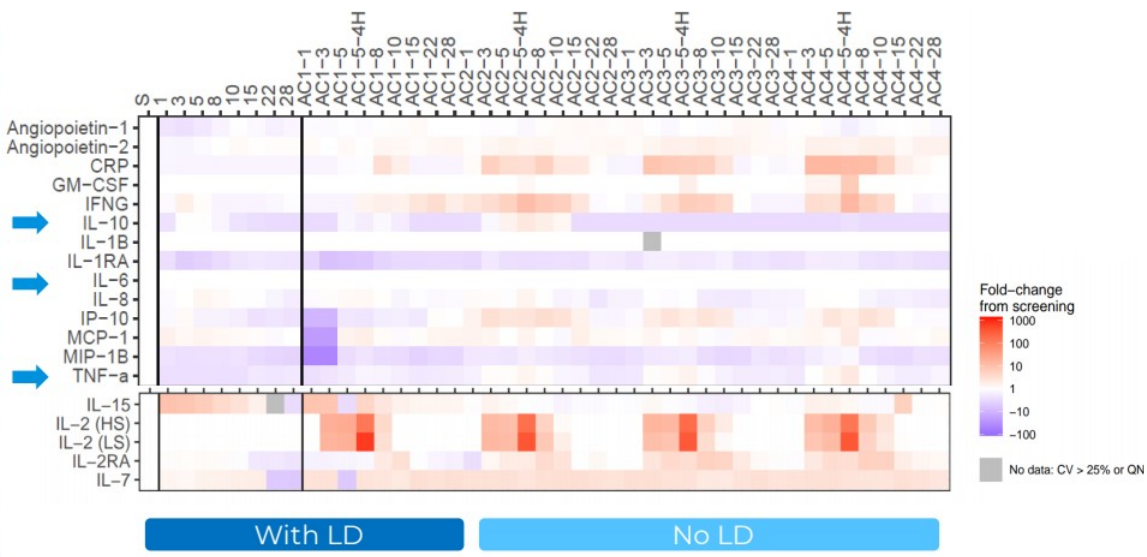
IL-2: Subcutaneous 3e6 IU for 8 days, except for initial cycle

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

CENTURY THERAPEUTICS

ASH case study: Favorable initial safety profile

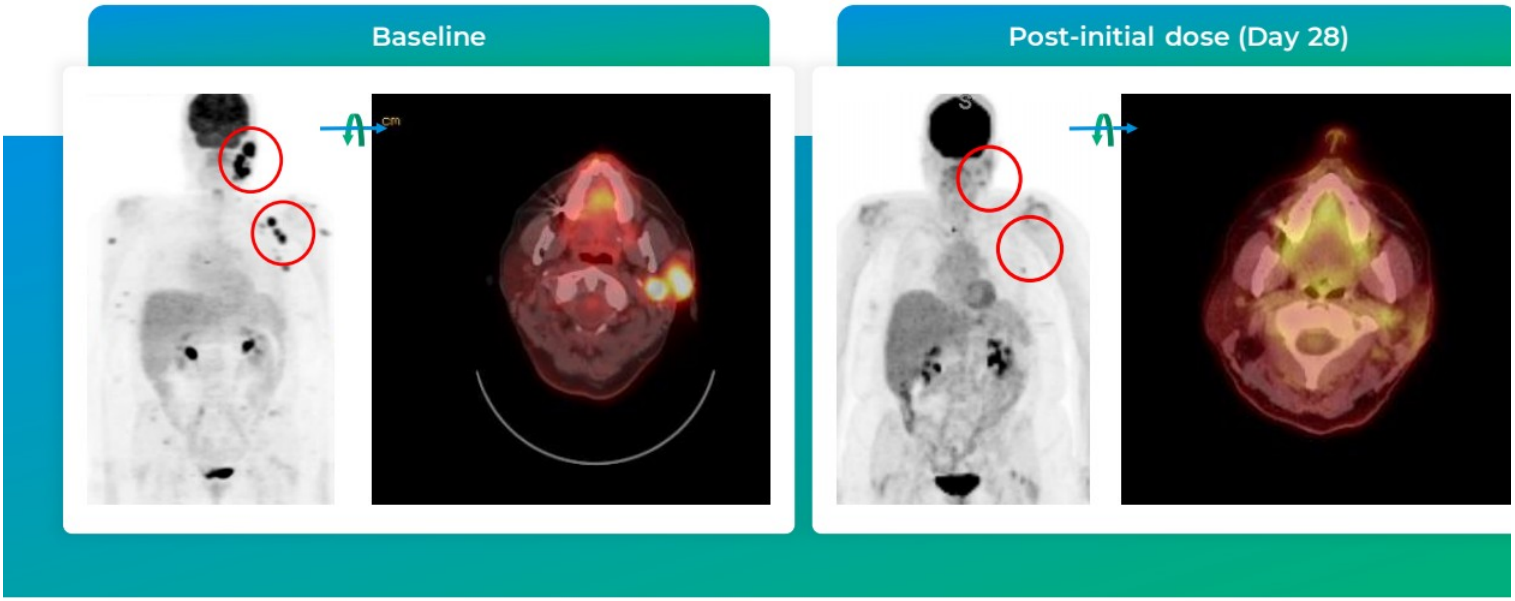
- No DLTs, no CRS, no ICANS
- No AEs related to CNTY-101
- Factors associated with CRS and neurotoxicity were not significantly elevated
- Elevation in peripheral IL-2 is observed, coinciding with IL-2 administration



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

CENTURY THERAPEUTICS

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

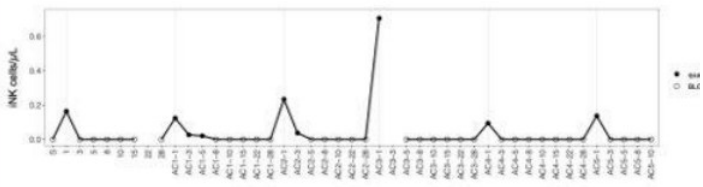


^Patient subsequently progressed
Ramachandran, et al. 2023 ASH Annual Conference

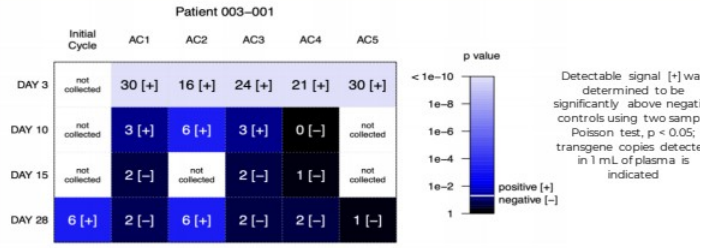
CENTURY THERAPEUTICS

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

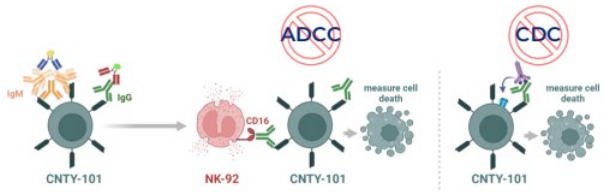
PK shows CNTY-101 cells traffic out of circulation shortly after infusion; consistent levels at 1-hour post-infusion are observed with and without LD



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



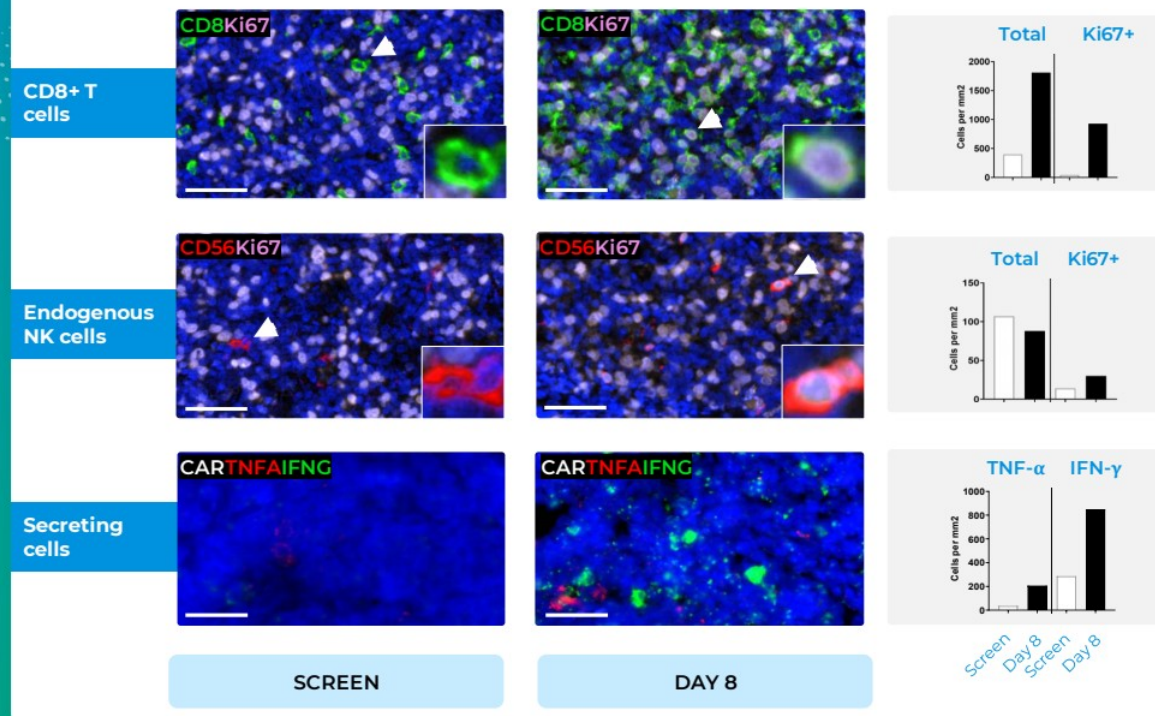
Anti-drug antibodies and functional humoral immune response against CNTY-101 are not detected (five cycles evaluated)



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

CENTURY THERAPEUTICS

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



CENTURY THERAPEUTICS

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

CENTURY THERAPEUTICS

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

Estimated global prevalence of 3.4 million patients[1]

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

Despite approved treatments, significant unmet need remains

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

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

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

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

CENTURY THERAPEUTICS

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

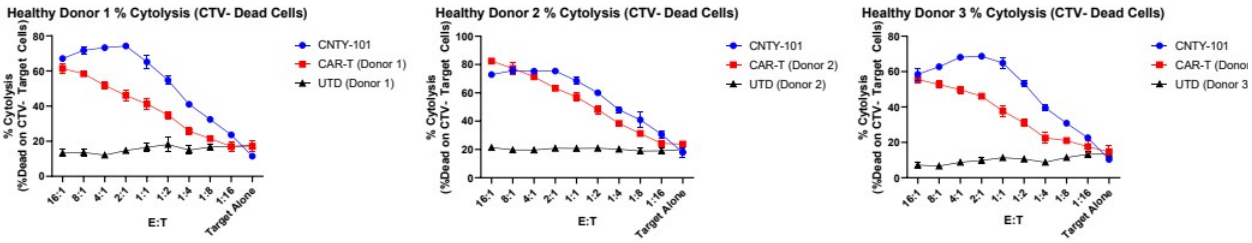
- Anti-CD19 CAR-iNK cells derived from an HDR precision-edited iPSC clone, including IL-15 cytokine support, a safety switch, and Allo-Evasion™ edits
- Clonal, consistent, well-characterized product
- Available off-the-shelf, without requiring patient apheresis, no manufacturing wait time
- Favorable 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

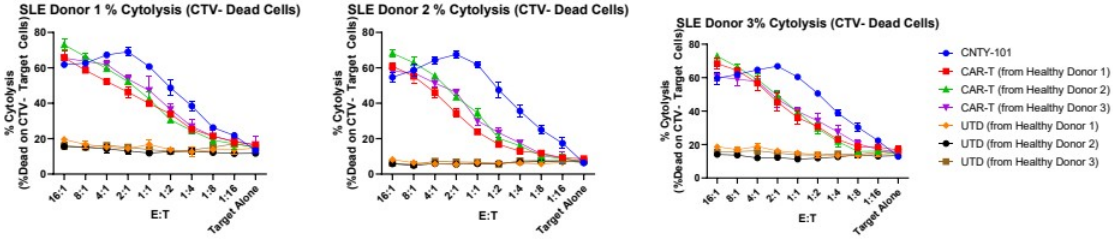
CENTURY THERAPEUTICS

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

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



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



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

Isolated B cells or CD19+ target cells were co-cultured with CNTY-101 or primary CAR-T at several E:Ts in 96-well U bottom plates in NKCM with assay harvested at 24h. Assay plates were harvested and stained for Fixable Live/Dead. Cells were fixed and run on cytometer to determine Target+Dead Cell populations.

CENTURY THERAPEUTICS

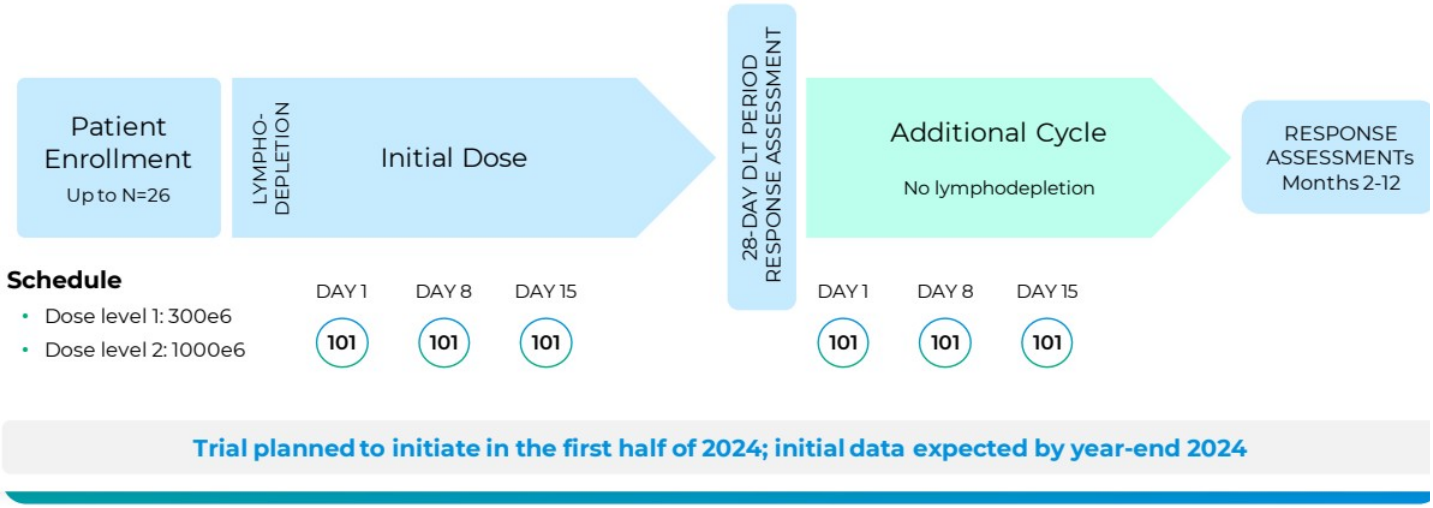
CNTY-101: Systemic lupus erythematosus Phase 1 study

Inclusion:

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

Endpoints:

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



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

CENTURY THERAPEUTICS

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 lead CAR iNK candidate 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 autoimmune and inflammatory indications
- *FDA cleared IND for CNTY-101 in systemic lupus erythematosus*

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 malign
- Additional data expected in mid-2024

Phase 1 trial of CNTY-101 in SLE
- IND clearance obtained
- Initiation expected in 1H 2024
- Initial data expected by YE 2024

CASH RESOURCES

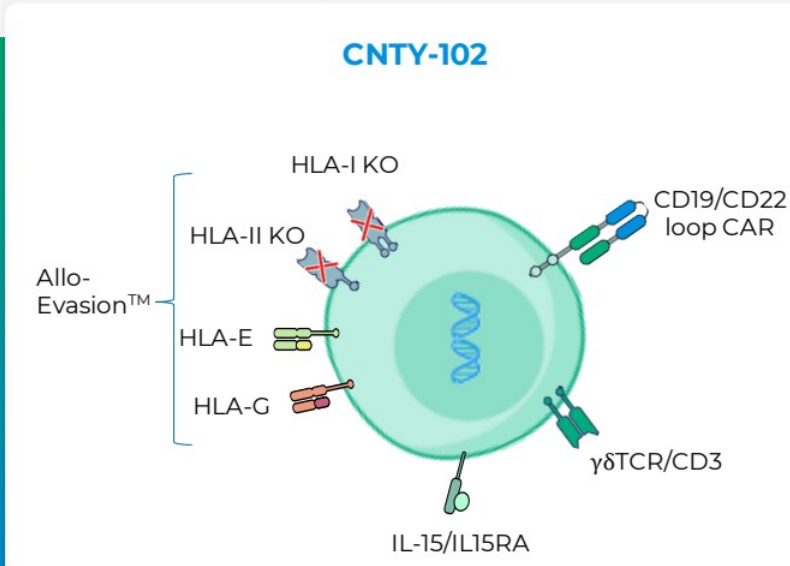
Cash runway into 2026

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

CENTURY THERAPEUTICS


CENTURY
THERAPEUTICS
Discovery Programs

CNTY-102: Leveraging the γδ iT platform designed to deliver best-in-class potential



Illustrative construct

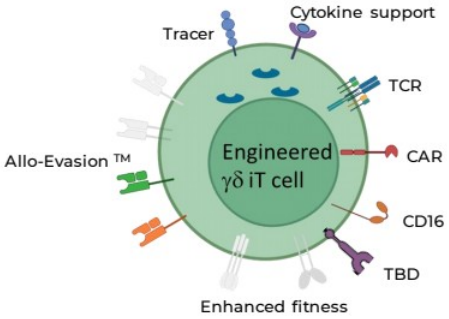
Designed to address factors that limit durability of cell therapy in B-cell malignancies

- γδ iT cells expand, persist, and traffic to lymphoid tissues leading to potentially sustained anti-tumor activity
- 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

CENTURY THERAPEUTICS

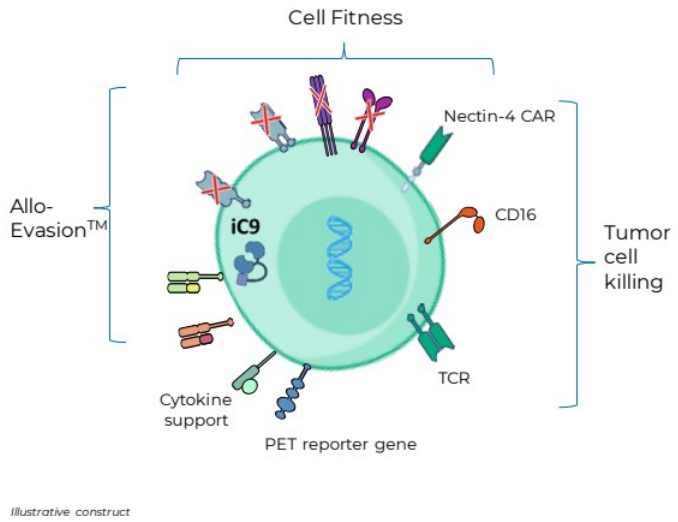
Vision for winning in solid tumors with γδ iT platform

Challenges	Century's Solution
Trafficking and infiltration	γδ iT cells – tissue homing
Tumor heterogeneity	Engage endogenous immunity; multi tumor targeting pathways
Requirement for chemotherapy conditioning	Novel conditioning regimens; genetic engineering
TME/immunosuppressive environment	Future engineering strategies



CENTURY THERAPEUTICS

CNTY-107: First in class Nectin-4 targeted γδ iT cell therapy



Illustrative construct

Leveraging the power of the γδ 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 cancers[1]

GD iT allogeneic therapies provide potential to improve upon ADC toxicity profile and efficacy

- Intrinsic homing of GD iT cells to tissues and soli malignancies
- Multi-tumor killing modalities to tackle heterogeneity

1. Cancer Res. 2016 May 15;76(10):3003-13

CENTURY THERAPEUTICS

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

CENTURY THERAPEUTICS