

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): October 3, 2023

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

Delaware
(State or other jurisdiction of
incorporation or organization)

001-40498
(Commission File Number)

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

3675 Market Street
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 October 3, 2023, Century Therapeutics, Inc. (the “Company”) updated information reflected in a slide presentation, which is attached hereto as Exhibit 99.1 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	Investor Presentation of Century Therapeutics, Inc., dated October 3, 2023
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

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

CENTURY THERAPEUTICS, INC.

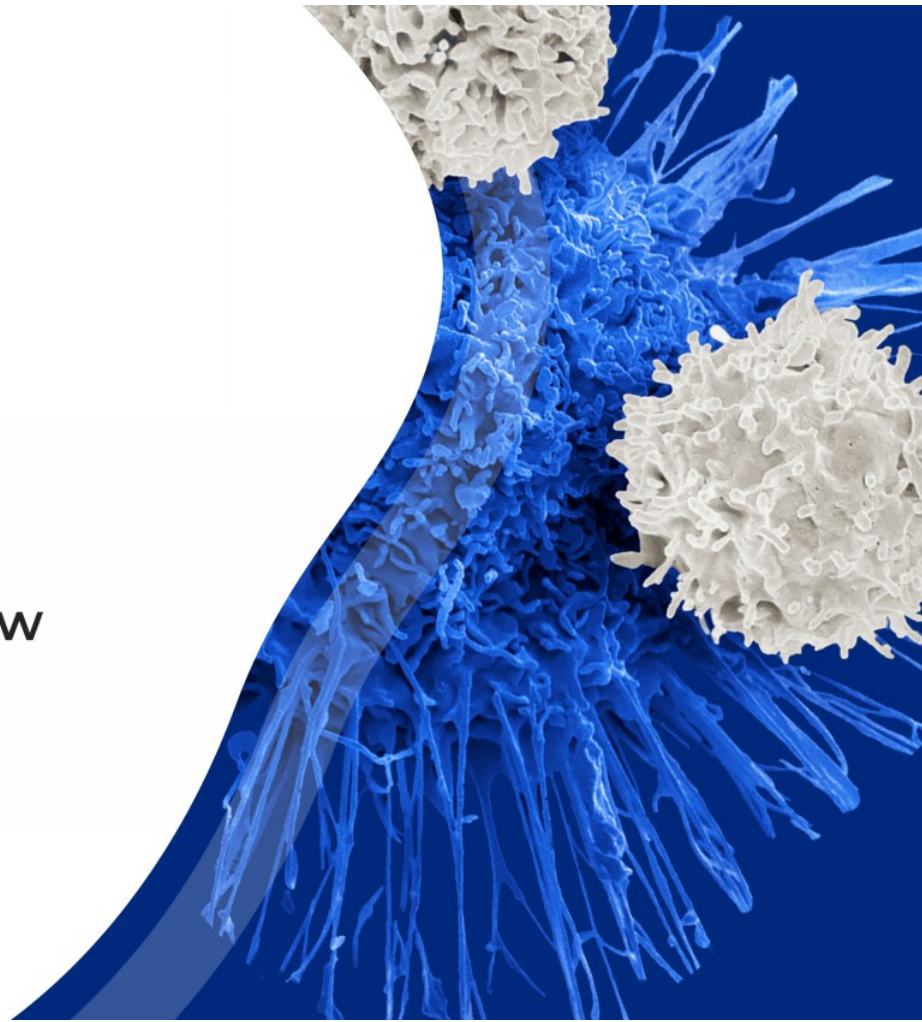
By: /s/ Gregory Russotti, Ph.D.
Name: Gregory Russotti, Ph.D.
Title: Interim President and Chief Executive Officer

Date: October 3, 2023



Corporate Overview

October 2023



Forward-looking statements

This presentation contains forward-looking statements within the meaning of, and made pursuant to the safe harbour provisions of, The Private Securities Litigation Reform Act of 1995. All statements contained in this document, other than statements of historical facts or statements that relate to present facts or current conditions, including but not limited to, statements regarding possible or assumed future results of operations, business strategies, research and development plans, regulatory activities, market opportunity, competitive position and potential growth opportunities are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "might," "will," "should," "expect," "plan," "aim," "seek," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "forecast," "potential" or "continue" or the negative of these terms or other similar expressions. The forward-looking statements in this presentation are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this presentation and are subject to a number of risks, uncertainties and assumptions, some of which cannot be predicted or quantified and some of which are beyond our control, including, among others: our ability to successfully advance our current and future product candidates through

development activities, preclinical studies, and clinical trials; our ability to obtain regulatory approval on certain key collaborative relationships; the impact of the COVID-19 pandemic, geopolitical issues and inflation on our business operations, supply chain and labor force; the performance of third parties conducting our future clinical trials as we conduct our business; our ability to successfully advance our product candidates and develop sales and marketing for our product candidates; our ability to successfully enforce adequate intellectual property protection; and other risks and uncertainties are described more fully in the section of our most recent filings with the Securities and Exchange Commission and available at www.sec.gov. You should not rely on forward-looking statements as predictions of future 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, the global economic, dynamic industry and economy. New risk factors and uncertainties may emerge from time to time, and it is not possible for us to predict all risk factors and uncertainties that we may face. Notwithstanding that we are required by applicable law, we do not plan to publicly update or revise forward-looking statements contained herein, whether as a result of new information, future events, changed circumstances

Investment Thesis



Next generation platforms for iNK and gamma delta iT candidates

Foundational investments in iPSC technology, genetic editing, and ma

Experienced team in R&D, immuno-oncology, manufacturing and commercialization

Exemplified by FDA clearance of Century's first IND for CNTY-101 & trial

Well capitalized with cash runway into 2026

\$301.0M in cash, cash equivalents and investments at the end of 2Q23; efficiencies designed to enable delivery on key milestones, clinical data



iPSC Platform

Building a next generation allogeneic cell therapy platform

iPSC Reprogramming



- Comprehensive collection of clinical grade lines (CD34+ HSC, $\alpha\beta$ T cell, $\gamma\delta$ T cell derived)

Gene Editing

- Proprietary gene editing platform
 - CRISPR MAD7-derived gene editing precise transgene integration

iPSC Differentiation/Manufacturing



- Scalable protocols and processes to produce highly functional iNK and iT cell products

Protein Engineering

- Developing proprietary next-generation
- Universal tumor targeting platform

Vertically integrated capabilities differentiate Century's approach

Foundational investments in iPSC know-how and manufacturing



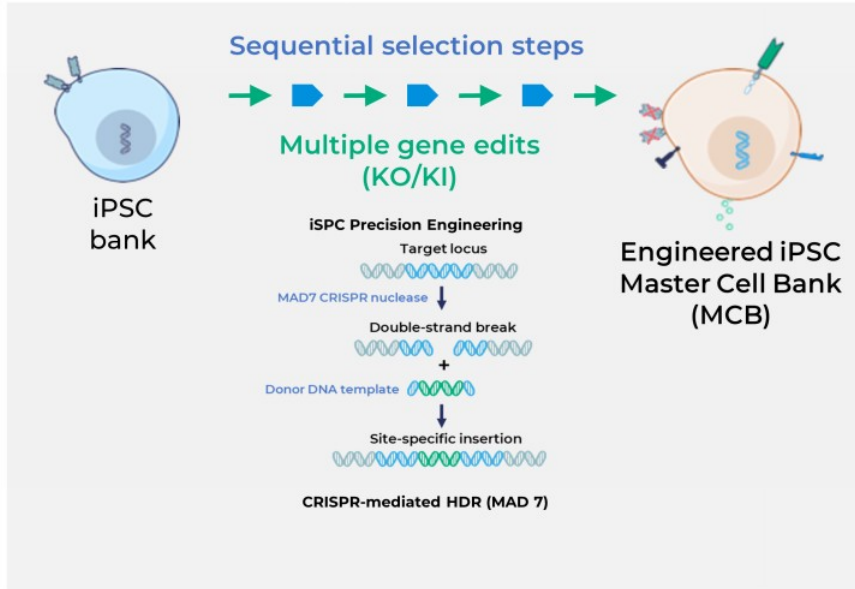
iPSC license and collaboration agreement established in 2018

- Access to clinical grade iPSC lines
- Exclusive IP and know-how to generate immune effector cells using feeder-free methods (NK, T, Mac, DC)
- FCDI GMP manufacturing capacity for Century's product candidates
- Leveraging two decades of research & investment at University of Wisconsin and FCDI

Established in-house manufacturing accelerates learnings and enables fast product iteration

- 53,000 ft² facility
- Designed to produce multiple immune cell
- Two sites provides optionality and maximize flexibility

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



Advantages of Century's Platform

Precise CRISPR mediated homology directed repair reduces off-target integration

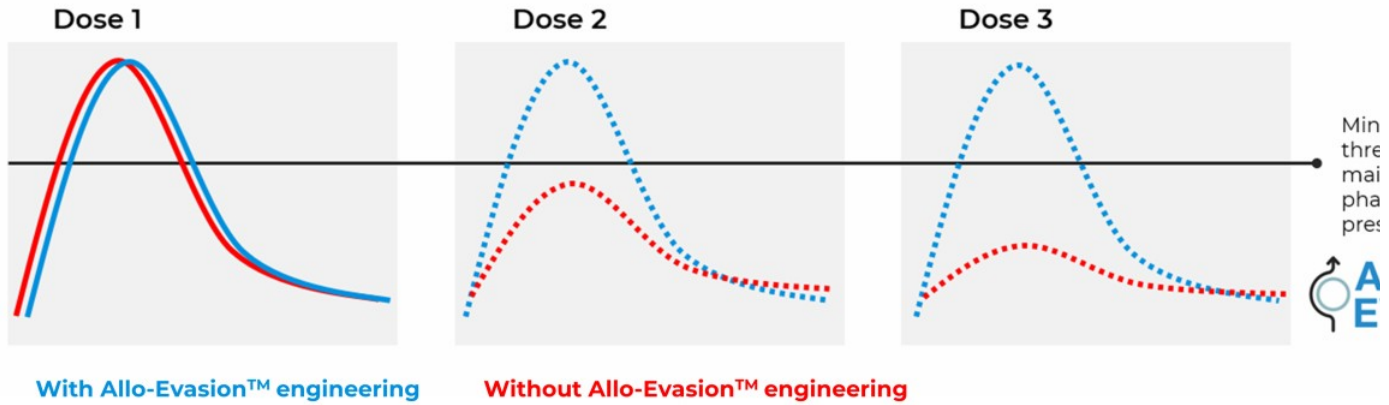
Stepwise and efficient gene editing **enables** **multiplex modification** and structural

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

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

Potential to drive durable responses with engineering to resist rejection

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

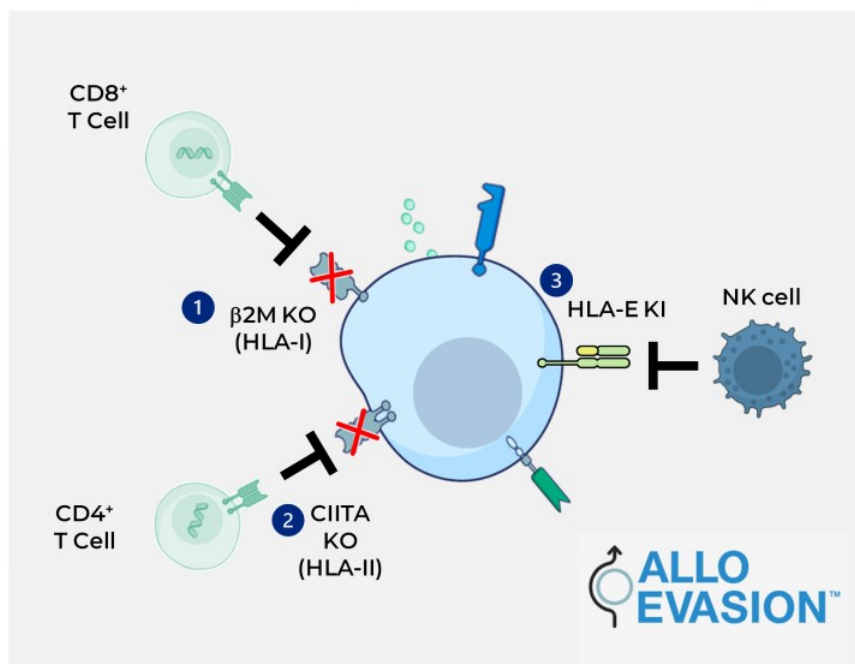


Next-wave of allogeneic cell therapies must solve for challenge of rejection

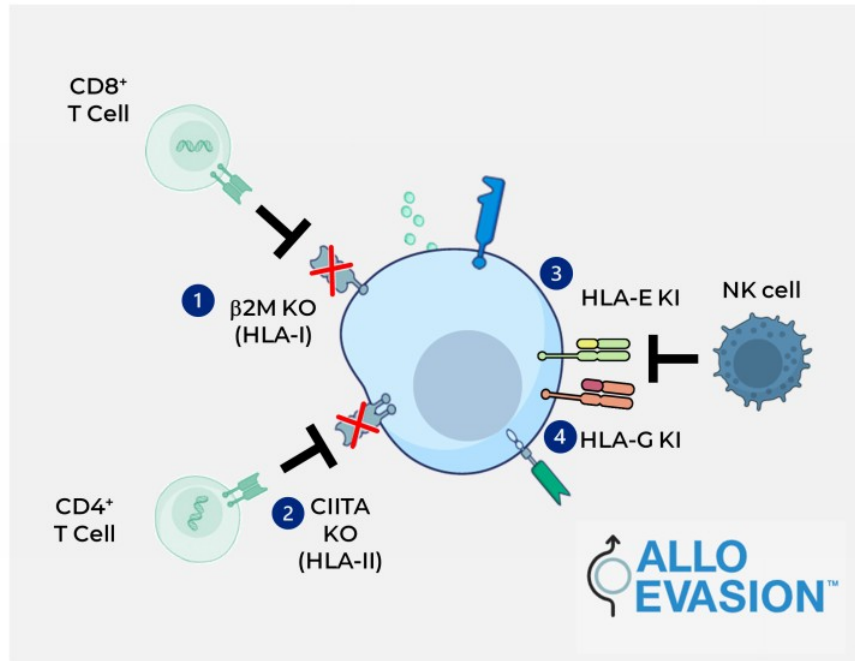
Allo-Evasion™ 1.0 designed to overcome 3 major pathways of graft rejection

3 core edits disarm host cells from eliminating therapy

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



Allo-Evasion™ 3.0 Provides Additional Protection Against NK C

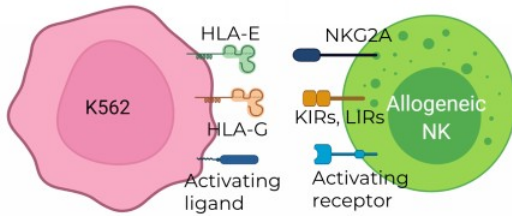


4 core edits disarm host cells for eliminating therapy

1. Deletion of β 2M, a protein required to stabilize HLA-I on the cell surface prevents recognition by CD8 T cells
2. Knock out of CIITA eliminates HLA-II expression, preventing 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

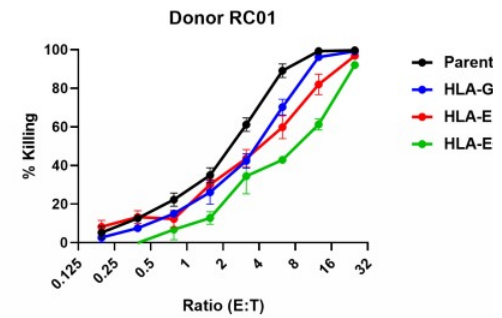
Expression of HLA-E + HLA-G further protects from NK cell killing

Proof-of-Concept Study with HLA-I Null K562 Cells Engineered with HLA-E and HLA-G

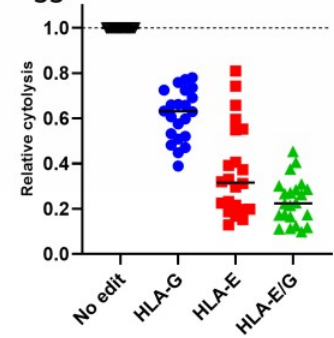


- HLA-E and HLA-G engage different receptors on NK cells including NKG2A, KIRs, and LIRs
- The expression of NKG2A, KIRs, and LIRs varies among NK cells from different donors

The Combination of HLA-E + HLA-G Imparts Protection to Killing by Allogeneic NK



Agglomerated Data from 22 NK Cell Donors











Pipeline

Pipeline

Product candidate pipeline across cell platforms and targets in solid and hematologic cancers

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

 Solid Tumors  Hematologic Tumors

Promise of allogeneic cell therapies in lymphoma



Large unmet need remains despite progress with autologous cell therapies

- ~25% of eligible patients receive CAR-T therapy¹
- ~35% of patients achieve long-term remission even in earlier lines of therapy¹



Off-the-shelf modalities approaching bar set by autologous but falling short on durability

- Rejection limits potential of durable responses for first wave of allogeneic cell products
- Bispecifics lack curative potential of cell therapy

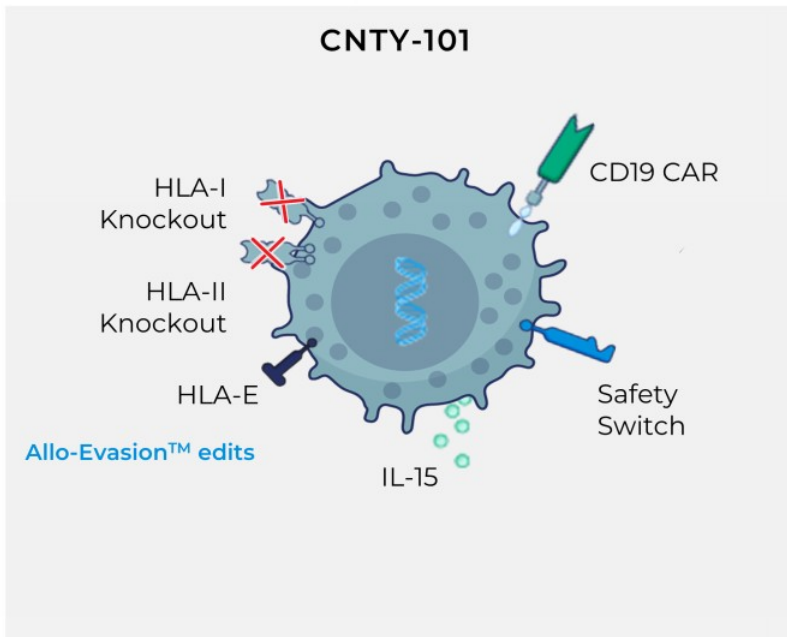


Goal to deliver more response rates vs autologous

- Century candidates realize benefit of r enabled by Allo-E
- Shift from “one or repeat dosing to i pharmacological |

1. Targeted Oncology, Many Challenges, Opportunities for CAR T-Cell Therapies in Lymphoma, Sept 2022

CNTY-101: Differentiated next-gen CD19 targeted product

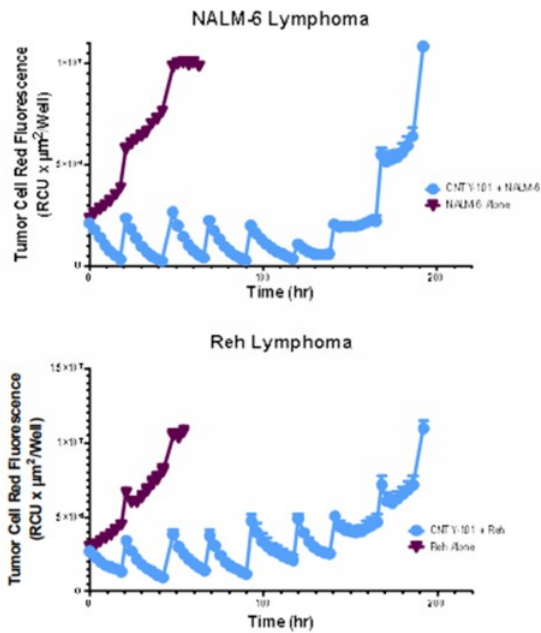


Delivering on our vision to change therapy treatment paradigm

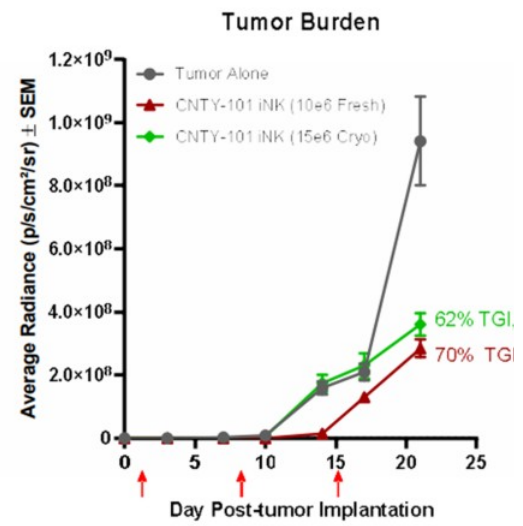
- Goal to improve durability, tolerability and ease of outpatient administration
- Potential to eliminate need for lymphodepletion with subsequent therapy
- First CD19-targeted agent to test durability benefit of repeat dosing enabled by Allo-Evasion™ edits

CNTY-101 shows strong pre-clinical anti-tumor activity

In Vitro Serial killing assay



Robust activity against lymphoma xen



Borges, et al, ASH 2021

ELiPSE-1: Ongoing first-in-Human Study CNTY-101 in patients with relapsed/refractory CD19+ B-cell lymphomas

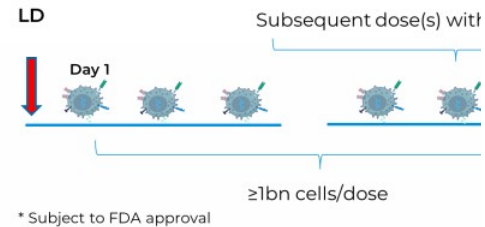
Schedule A: Single ascending dose study
(3+3 escalation design)

DL1	DL2	DL3
100M	300M	1Bn

+ IL-2
2nd cycle of single dose allowed for patients who demonstrate benefit



Schedule B: Accessing 1
doses per cycle



Study to assess:

Impact of Allo-Evasion™ on iNK cell persistence and PK after multiple dosing (Schedule B)

Multiple dose regimen with up to 6 doses with single lymphodepletion conditioning

Potential to increase durability of responses with Allo-Evasion™ enabled repeat dosing regimen

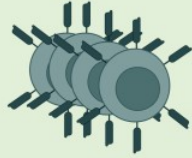
- Initial clinical data including PK, PD and safety data from Schedule A expected by
- Clinical data providing initial proof-of-concept expected in 2024

Eclipse-1 Translational Approach

Readouts


Key Methods

Identify optimal dosing regimen



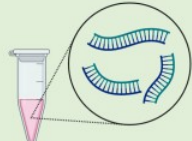
Cellular Pharmacokinetics (PK)

iNK cells



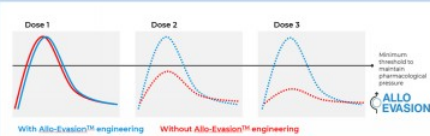
PK in blood

iNK cf-DNA




Persistence in the body

Assess impact of Allo-Evasion™



PK after redosing

Immunogenicity

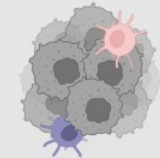


Humoral Cellular


Functional anti-drug antibodies

- CAR Neutralization
- ADCC Competence
- CDC Competence

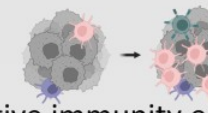
Evaluate mechanism of action



Pharmacodynamics



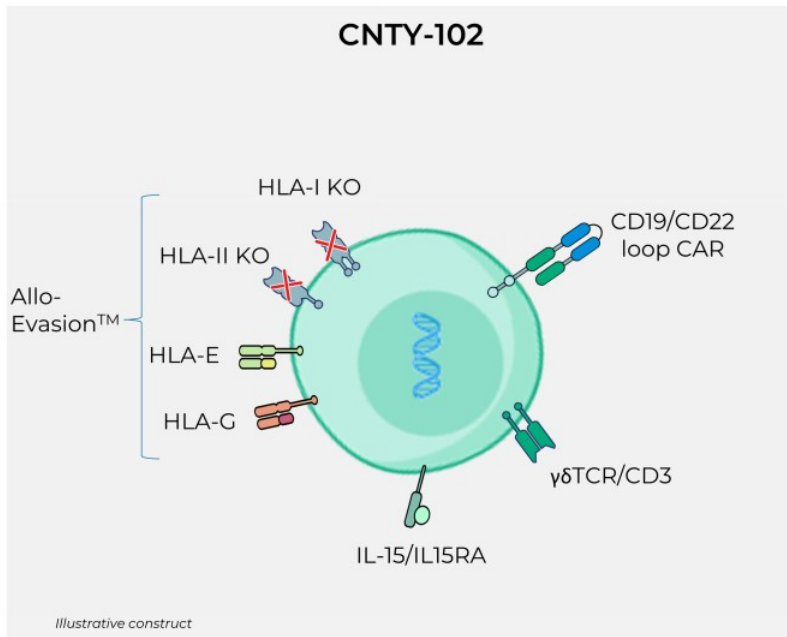
MRD B c



Adaptive immunity e

MRD= minimum residual disease; CDC=complement-dependent cytotoxicity; ADCC= antibody-dependent cellular cytotoxicity; CAR=chimeric antigen receptor; cf-DNA=cell free deoxyribonucleic acid

CNTY-102: Leveraging the $\gamma\delta$ iT platform designed to deliver best-in-class potential



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

- $\gamma\delta$ iT cells demonstrate high persistence, trafficking leading to potentially sustained anti-tumor responses
- Dual targeting designed to counteract antigen escape relapse - a major factor for durability of CD19 CAR therapies
- Armed with Allo-Evasion™ edits to support repeat dosing to potentially deliver durable responses

Vision for winning in solid tumors with $\gamma\delta$ iT platform

Challenges

Trafficking and infiltration

Tumor heterogeneity

Requirement for chemotherapy conditioning

TME / Immunosuppressive environment

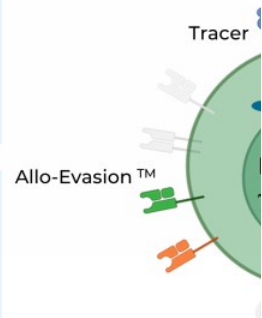
Century's Solution

$\gamma\delta$ iT cells - tissue homing

- Engage endogenous immunity
- Multi tumor targeting pathways

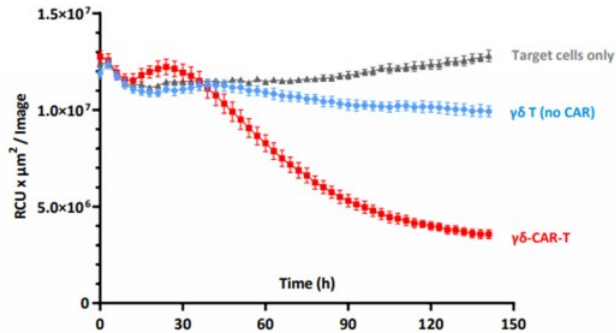
- Novel conditioning regimens
- Genetic engineering

Future engineering strategies

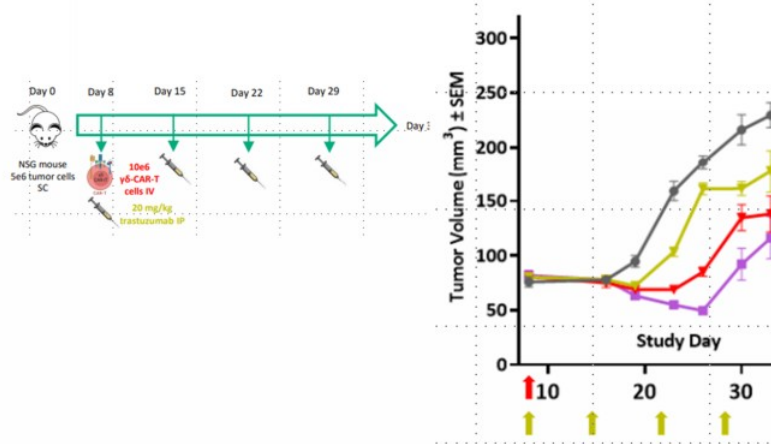


iPSC-derived $\gamma\delta$ T cells effective at tumor control as monotherapy combination with antibody

$\gamma\delta$ -EGFR-CAR-T cells demonstrate significant CAR killing of ovarian spheroids



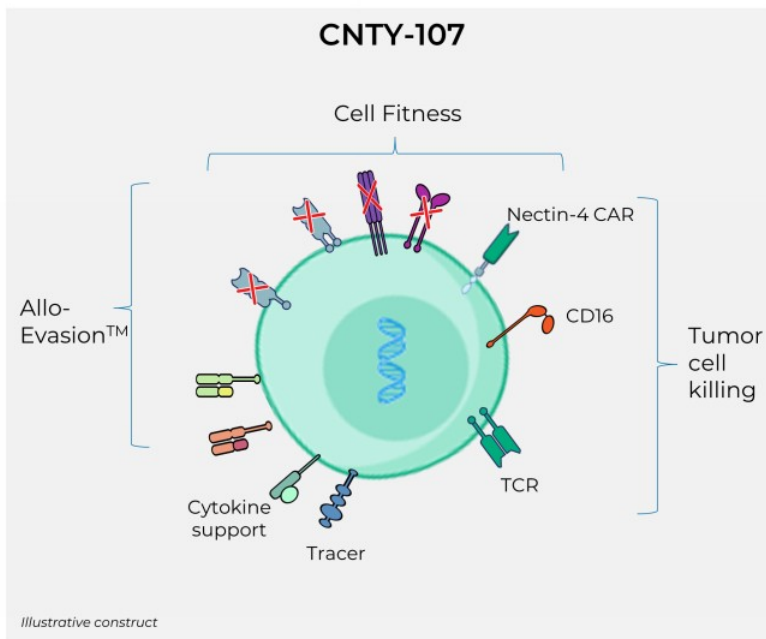
$\gamma\delta$ CAR-T demonstrate additive efficacy with trastuzumab



Treatment	% TGI	Significance
trastuzumab	0	P=0.9980
$\gamma\delta$ -CAR-T	18	P=0.7073
$\gamma\delta$ -CAR-T + trastuzumab	42	P=0.0358

TGI = Tumor Growth Inhibition

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



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

Nectin-4 has been validated by ADC applications

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

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

- Intrinsic homing of GD iT cells to tissue malignancies
- Multi-tumor killing modalities to tackle heterogeneity

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\$301.0M in cash, cash equivalents and investments at the end of 2Q23; efficiencies designed to enable delivery on key milestones, clinical data

Emerging leader in cell therapies for cancer

Comprehensive iPSC cell platform

For immune effector cells

Technical Expertise

Genetic and protein engineering, process development and immuno-oncology

Foundation in Science

Continuing investment in innovation drives R&D

State-of-manufact

Fully opera
improve
produ

Financial Strength

Cash runway into 2026, Ended 2Q23 with cash, cash equivalents, and investments of \$301M

Emerging pipeline of candidates

Product engine anticipated to deliver additional candidates and INDs in the coming years

BMS Discovery Collaboration

Initial focus on AML (CNTY-104) and Multiple Myeloma (CNTY-106)

Employee
experien
and ent



Thank you.

