

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): November 30, 2022

**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 7.01 Regulation FD Disclosure**

On November 30, 2022, Century Therapeutics, Inc. (the “Company”) updated information reflected in a slide presentation, which is attached 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.

The information contained in this Item 7.01 (including Exhibit 99.1) is being furnished and shall not be deemed “filed” for purposes of Section 18 of the Exchange Act, 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 9.01 Financial Statements and Exhibits**

**(d) Exhibits**

The following exhibit is being furnished herewith:

<b>Exhibit No.</b>	<b>Document</b>
<a href="#">99.1</a>	<a href="#">Investor Presentation of Century Therapeutics, Inc., dated November 30, 2022</a>
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/ Osvaldo Flores, Ph.D.  
Name: Osvaldo Flores, Ph.D.  
Title: President and Chief Executive Officer

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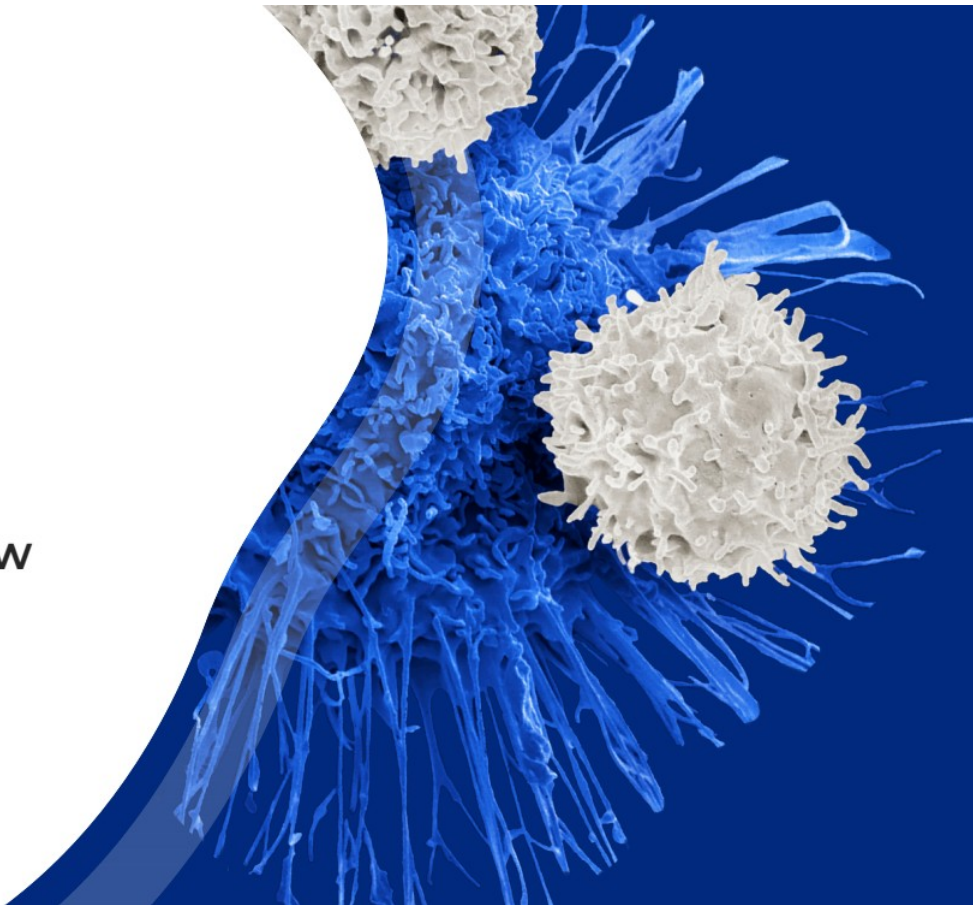
Date: November 30, 2022

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# Corporate Overview

November 2022



# 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; the impact of the COVID pandemic, 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](http://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 our forward-looking statements contained herein, whether as a result of a new information, future events, changed circumstances or otherwise.

# 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-the-art GMP manufacturing facilities**

Fully operational, enabling improved and faster product iteration

## **Financial Strength**

Cash runway into 2025, Ended 3Q22 with cash, cash equivalents, and investments of \$395.3M

## **Emerging pipeline of candidates**

Product engine anticipated to deliver 5 INDs over the next 3 years; CNTY-101 Phase 1 trial initiating imminently

## **BMS Discovery Collaboration**

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

**~200**

Employees including experienced leaders and entrepreneurs

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# 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 for 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 CARs
- 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

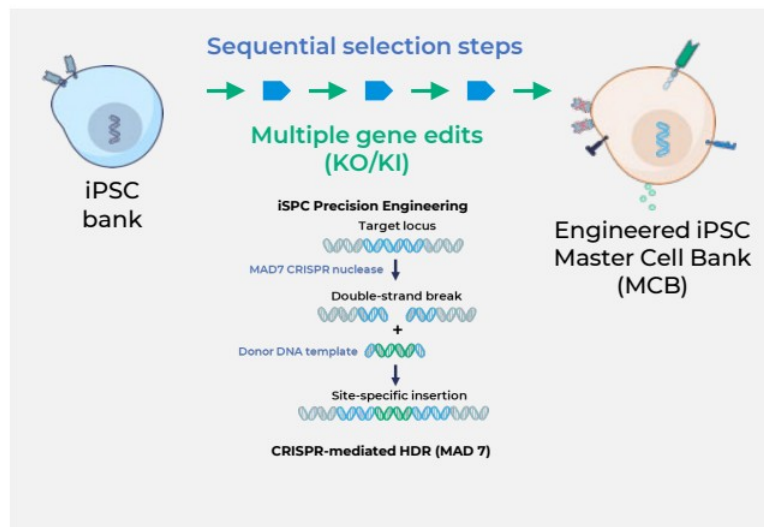
- Access to clinical grade iPSC lines
- Exclusive IP and know-how to generate immune effector cells using feeder-free methods (NK, T, Mac, DC)
- FCDI GMP manufacturing capacity for Century's product candidates
- Leveraging two decades of research & investment at University of Wisconsin and FCDI

## Established in-house manufacturing accelerates learnings and enables faster product iteration

- 53,000 ft<sup>2</sup> facility
- Designed to produce multiple immune cell types
- Two sites provides optionality and maximizes flexibility



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



## Advantages of Century's Platform

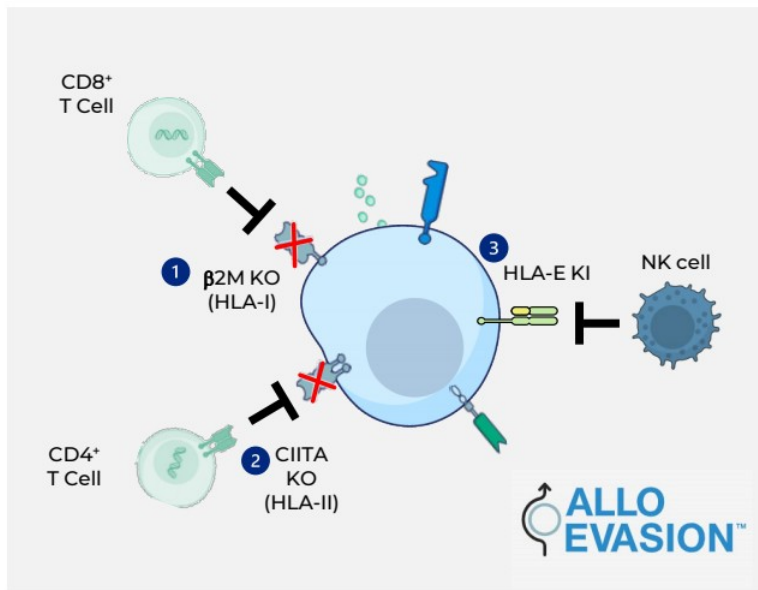
**Precise** CRISPR mediated homology directed repair reduces off-target integration

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**

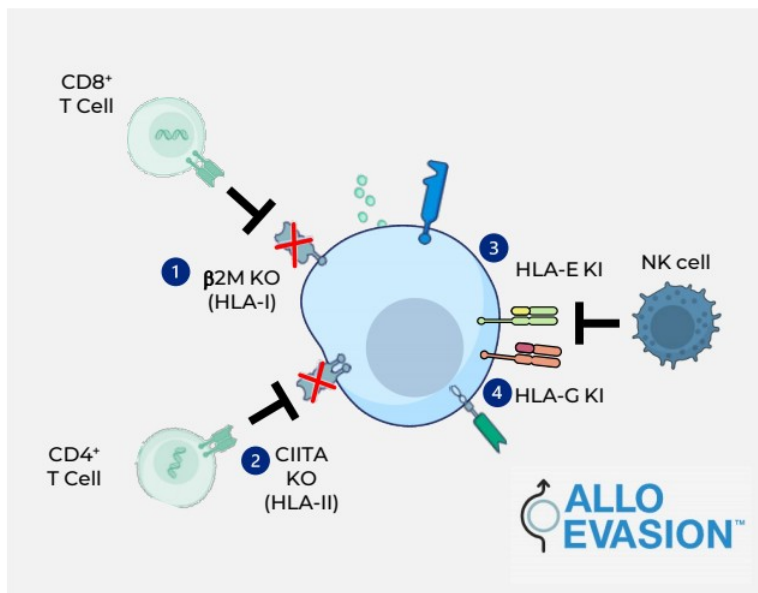
# Allo-Evasion™ 1.0 designed to overcome 3 major pathways of host vs graft rejection



## 3 core edits disarm host cells from eliminating therapy

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

# Allo-Evasion™ 3.0 Provides Additional Protection Against NK Cell Killin

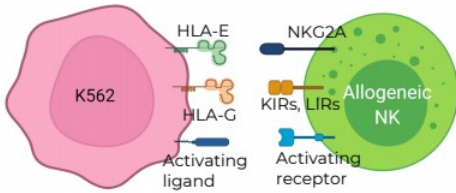


## 4 core edits disarm host cells from eliminating therapy

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

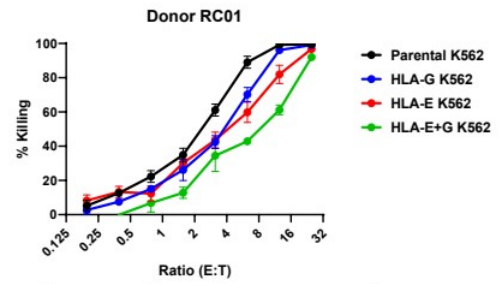
# Expression of HLA-E + HLA-G further protects from NK cell killing

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

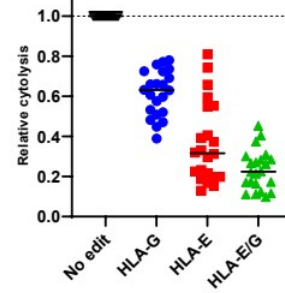


- HLA-E and HLA-G engage different receptors on NK cells including NKG2A, KIRs, and LIRs
- The expression of NKG2A, KIRs, and LIRs varies among NK cells from different donors

## The Combination of HLA-E + HLA-G Improved Protection to Killing by Allogeneic NK Cells



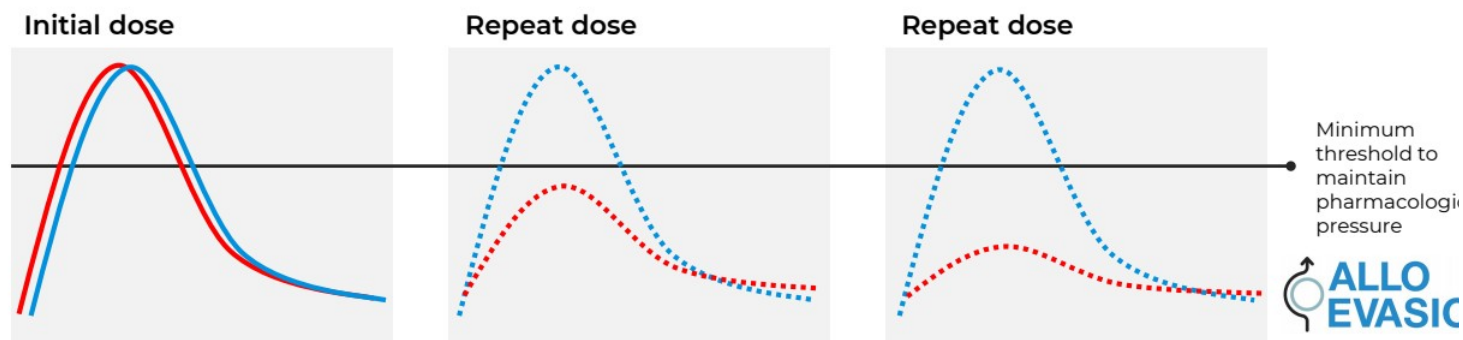
## Agglomerated Data from 22 NK Cell Donors



# Illustrative potential of Allo-Evasion™ on cellular pharmacokinetics and multiple doses

With Allo-Evasion™ engineering

Without Allo-Evasion™ engineering



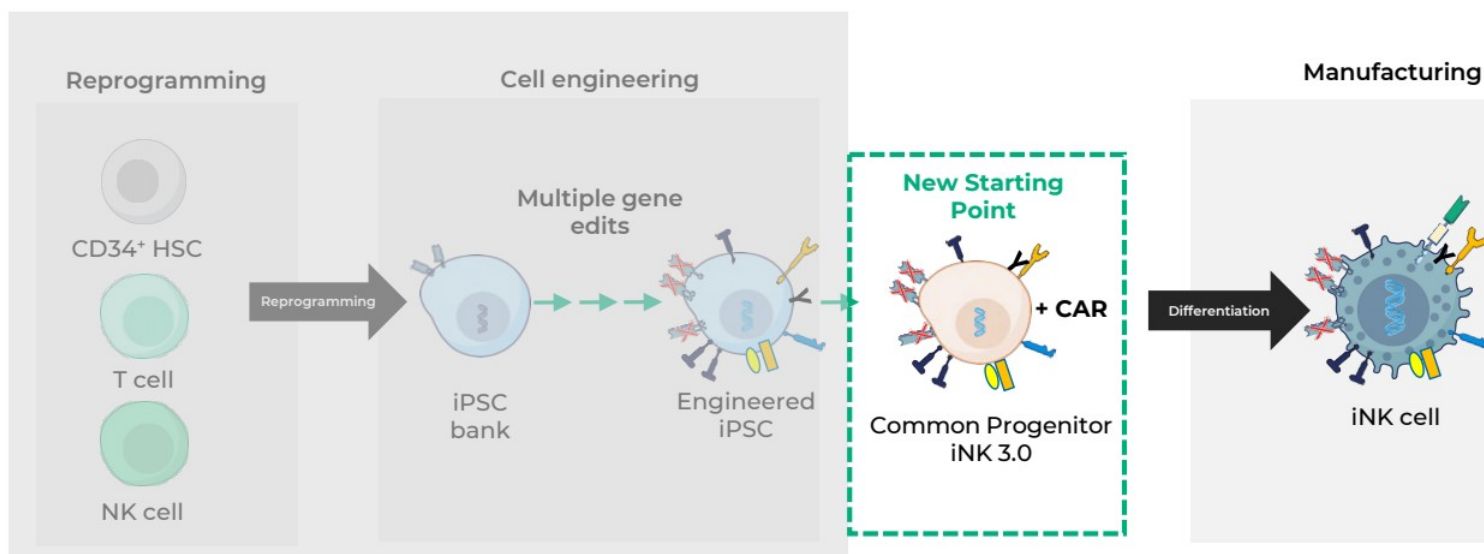
Lack of durable responses seen to date in other allogeneic approaches likely due to rejection of the product



Discovery

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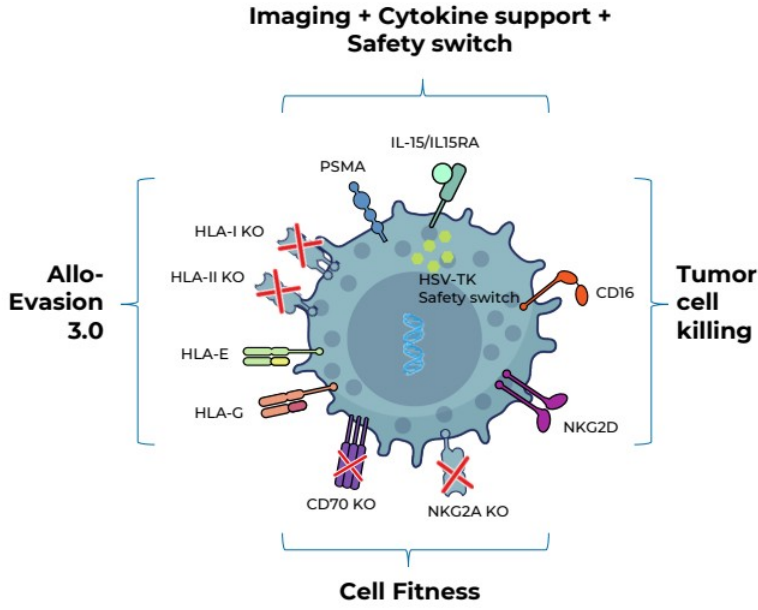
# Common progenitor milestone enables cost, time efficiencies



- iPSC cell bank with 12 core 3.0 gene edits introduced in 5 sequential steps
- Resets product development starting point: accelerates and de-risks development candidate selection



# iNK 3.0 common progenitor multiple new features for enhanced functionality

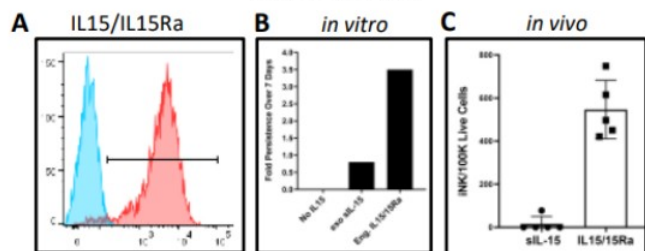


ENGINEERING PROFILE			
Step	Gene Edit		Rationale
1	KO	<b>NKG2A</b>	Potential to block inhibitory signal
	KI	<b>IL15/IL15Ra</b>	Homeostatic cytokine support
2	KO	B2M	Allo-Evasion
	KI	HLA-E-2A-HLA-G	Allo-Evasion
3	KO	CIITA ex5	Allo-Evasion
	KI	<b>HSV-TK-2A-PSMA</b>	Safety switch + cell tracer
4	KO	<b>CD70</b>	Landing pad, potential to enhance cell fitness
	KI	<b>CD16-2A-NKG2D</b>	Ab targeting + Tumor stress ligands
5	INS	CLYBL	Safe harbor site
	KI	CAR	Tumor targeting

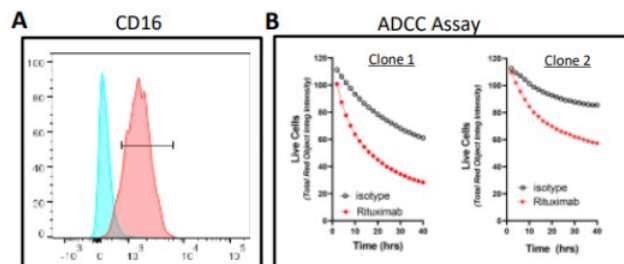
**Boldface:** iNK 3.0-specific gene edits

# iNK common progenitor edits confer improved persistence and anti-tumor efficacy

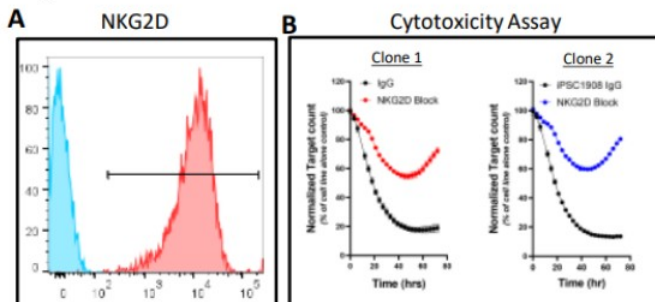
Engineering with IL15/IL15Ra shows increased persistence *in vitro* and *in vivo*



High affinity CD16 demonstrates enhanced ADCC activity



iNK cells engineered with NKG2D demonstrate enhanced tumor cell killing





## Pipeline and Franchises

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# Century's Key Areas of Internal Focus



## B cell malignancies

**CNTY-101:** Lead product candidate, CD19 targeted CAR-iNK

**CNTY-102:** First  $\gamma\delta$  iT candidate, multi-specific (CD19 + CD79b) CAR-iT

Designed to increase proportion of patients achieving durable responses through multi-dosing regimens enabled by key Allo-Evasion™ edits



## Glioblastoma

**CNTY-103:** CD133 CAR iNK for recurrent GBM

Address heterogeneity via multi-tumor antigen targeting and safety and technical trafficking challenges with locoregional delivery



## Nectin-4 + Solid tumors

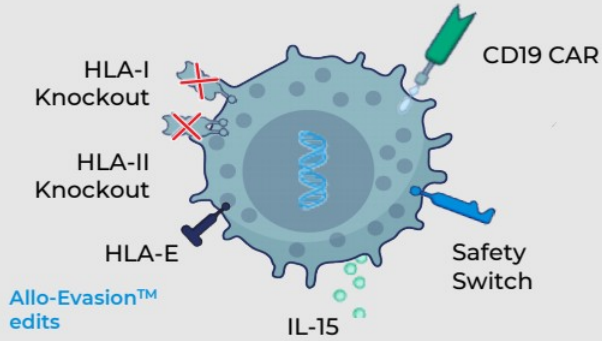
**CNTY-107:** Nectin-4 targeted CAR GD iT

Leveraging gamma delta iT platform designed to address several solid tumor indications with high expression of Nectin-4 and unmet need

# CNTY-101: differentiated next-gen CD19 targeted product

## CNTY-101

First cell product candidate designed to avoid all major pathways of host v graft rejection

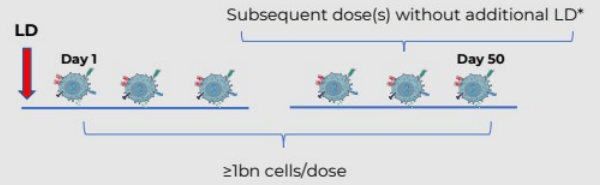


## ELIPSE-1 will assess:

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 LD conditioning

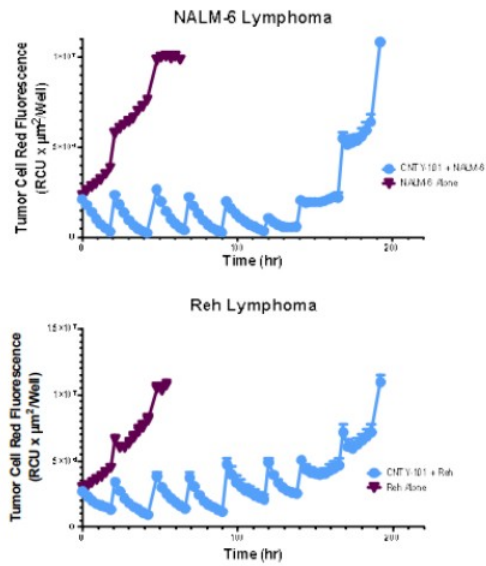
Potential to increase durability of responses with Allo-Evasion enabled repeat dosing regimen



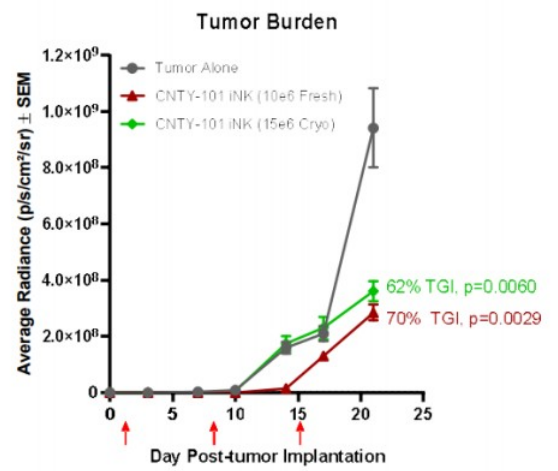
\* Subject to FDA approval

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

*In Vitro* Serial killing assay



Robust activity against lymphoma xenograft

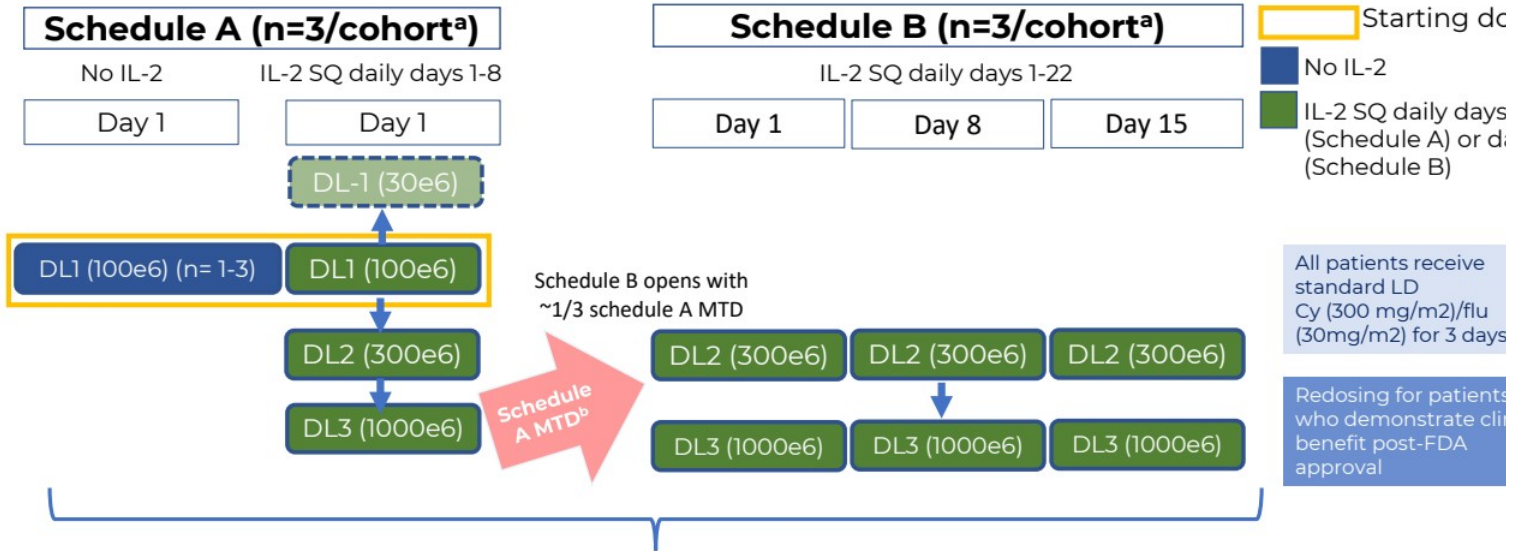


Borges, et al, ASH 2021



# ELiPSE-1 Treatment Schema

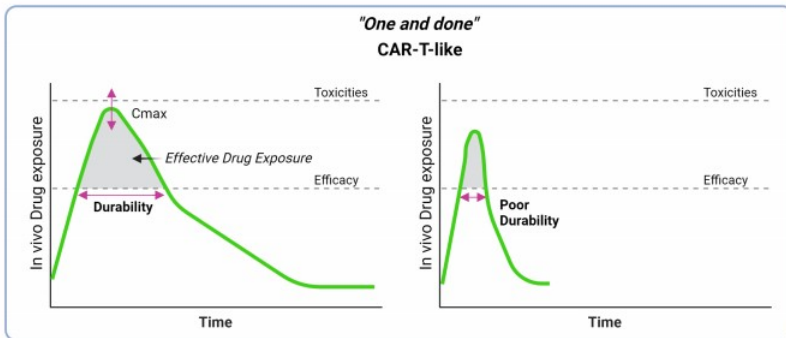
3 doses: 1 dose per week for three consecutive weeks



One overall CNTY-101 RP2R will be declared per SRC recommendation, based on both Schedule A and B MTDs, and expanded.

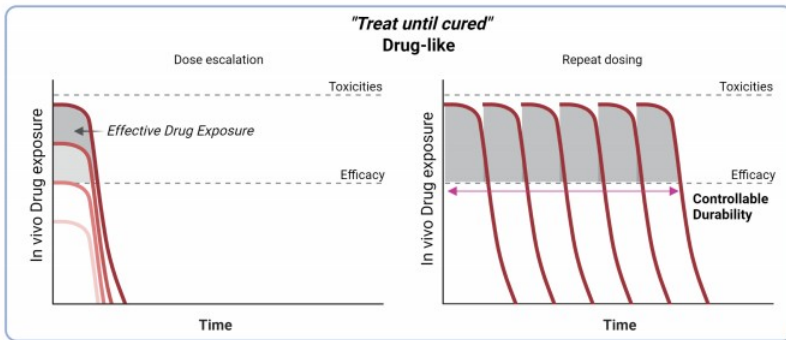
<sup>a</sup> Escalation guided by BOIN. SRC reviews data and implements dosing decisions  
<sup>b</sup> After the single dose MTD has been reached or the maximal single dose has been evaluated, or earlier upon the recommendation of the **Independent Data Review Committee** and Sponsor decision, Schedule B will also be explored (ie, given weekly for 3 weeks), starting with a fractionated dose of approximately one-third the MTD.

# Transforming the cell therapy treatment paradigm



- AUC main predictor of duration of response
- Variable cell expansion/exposure drives toxicity and suboptimal responses

*Single dose of allogeneic NK cells unlikely to match  $\alpha\beta$  autologous CAR T*



- Finite repeat dosing regimens have the potential to exceed bar set by autologous cell therapy and deliver more durable responses, **if** the cells are engineered to avoid host rejection (Allo-Evasion™)

Illustrative curves



# Addressing unmet need in B-cell malignancies

## Autologous Cell Therapies

- Only ~35-40% of patients achieve durable CRs
- Manufacturing complexity and toxicities limit community uptake

## Allogeneic Cell Therapies

- Durable CRs inferior to approved autologous therapies
- Repeat dosing strategies dependent on additional LD cycles to avoid rejection

## CD20 x CD3 Bispecifics

- Durable CRs inferior to approved autologous therapies
- Require chronic or 9-month long treatment cycles
- Toxicity profiles anticipated to limit uptake in community settings

## CNTY-101 has a differentiated target product profile

- Allo-Evasion enables multiple dose strategy to potentially generate durable responses that match or exceed those of autologous
- Anticipated safety allows for community setting use

- Potential for short, finite, repeat-dosing regimen with single LD cycle
- Uniform, fully characterized product

- Potential for short, finite, repeat-dosing regimen with single LD cycle
- Anticipated safety favors community adoption

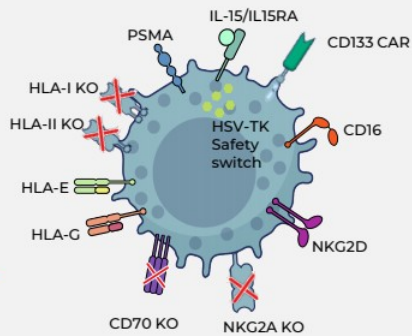
# CNTY-103: first program in CNS malignancies

Uniquely positioned to address challenges of GBM

Challenge	Century's Solution
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Trafficking	Local delivery with Ommaya reservoir
Heterogeneity	<ul style="list-style-type: none"> <li>• CD133 CAR-mediated tumor cell killing</li> <li>• CD16-mediated killing with mAbs against tumor antigens</li> <li>• NKG2D-mediated killing through stress ligand recognition</li> </ul>
Toxicity	Potentially minimize risks like CRS with iNK
Persistence	Potential to dose as needed

Allo-Evasion™  
edits



**CNTY-103**

Leverages iNK 3.0 common progenitor

# Winning in Solid Tumors

## Challenges

Trafficking and infiltration

Tumor heterogeneity

Requirement for chemotherapy conditioning

TME / Immunosuppressive environment

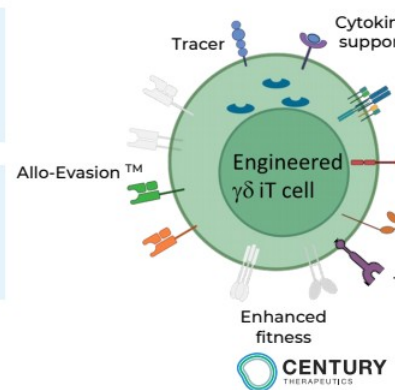
## Century's Solution

$\gamma\delta$  iT cells - tissue homing

- Engage endogenous immunity
- Multi tumor targeting pathways

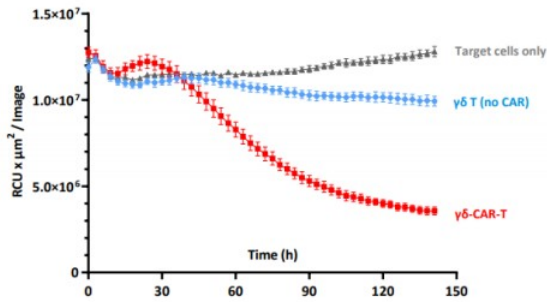
- Novel conditioning regimens
- Genetic engineering

Future engineering strategies

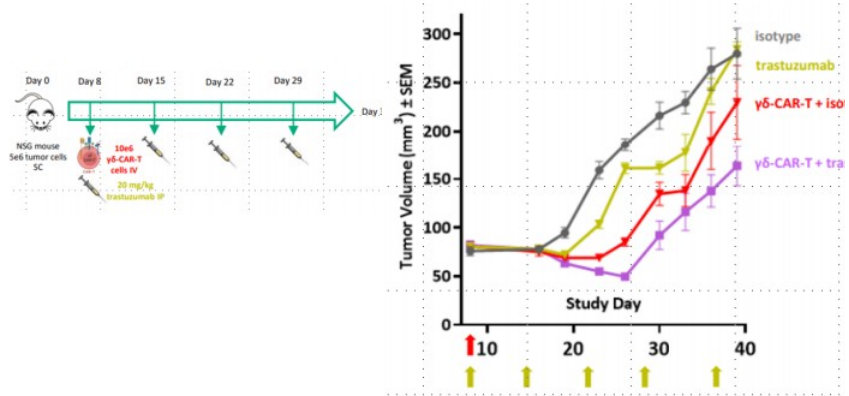


# $\gamma\delta$ -EGFR-CAR-T cells effective at tumor control as monotherapy and in combination with antibody

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



$\gamma\delta$ CAR-T demonstrate additive efficacy in combination 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

# Pipeline

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

● Solid Tumors
 ● Hematologic Tumors

Product	iPSC Platform	Targets	Indications	Expected IND Submission	Discovery	Preclinical	Clinical	Collaborator
CNTY-101	iNK	CD19	B-Cell Malignancies	Cleared to proceed 3Q22				
CNTY-103	iNK	CD133	Glioblastoma	2024				
CNTY-102	iT	CD19 + CD79b	B-Cell Malignancies	2024				
CNTY-104	iNK/iT	Multi-specific	Acute Myeloid Leukemia	2024				Bristol Myers Squ
CNTY-106	iNK/iT	Multi-specific	Multiple Myeloma	2024				Bristol Myers Squ
CNTY-107	iT	Nectin-4	Solid Tumors	2025				
Discovery Research Programs								
	iNK	TBD	Hematological Tumors	2023				
	iT	TBD	Solid Tumors	TBD				

# Anticipated Catalysts Over Next 12 Months

Underpinned by strong balance sheet with platform synergies and operational excellence

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## **CNTY-101**

- Phase 1 (ELIPSE-1) trial initiation in B-cell malignancies (by YE22)

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## **CNTY-101 Follow On (CNTY-102)**

- Present pre-clinical data at major medical meeting (2H23)

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## **CNTY-103**

- Disclose pre-clinical data of development candidate at major medical meeting (2H23)
-