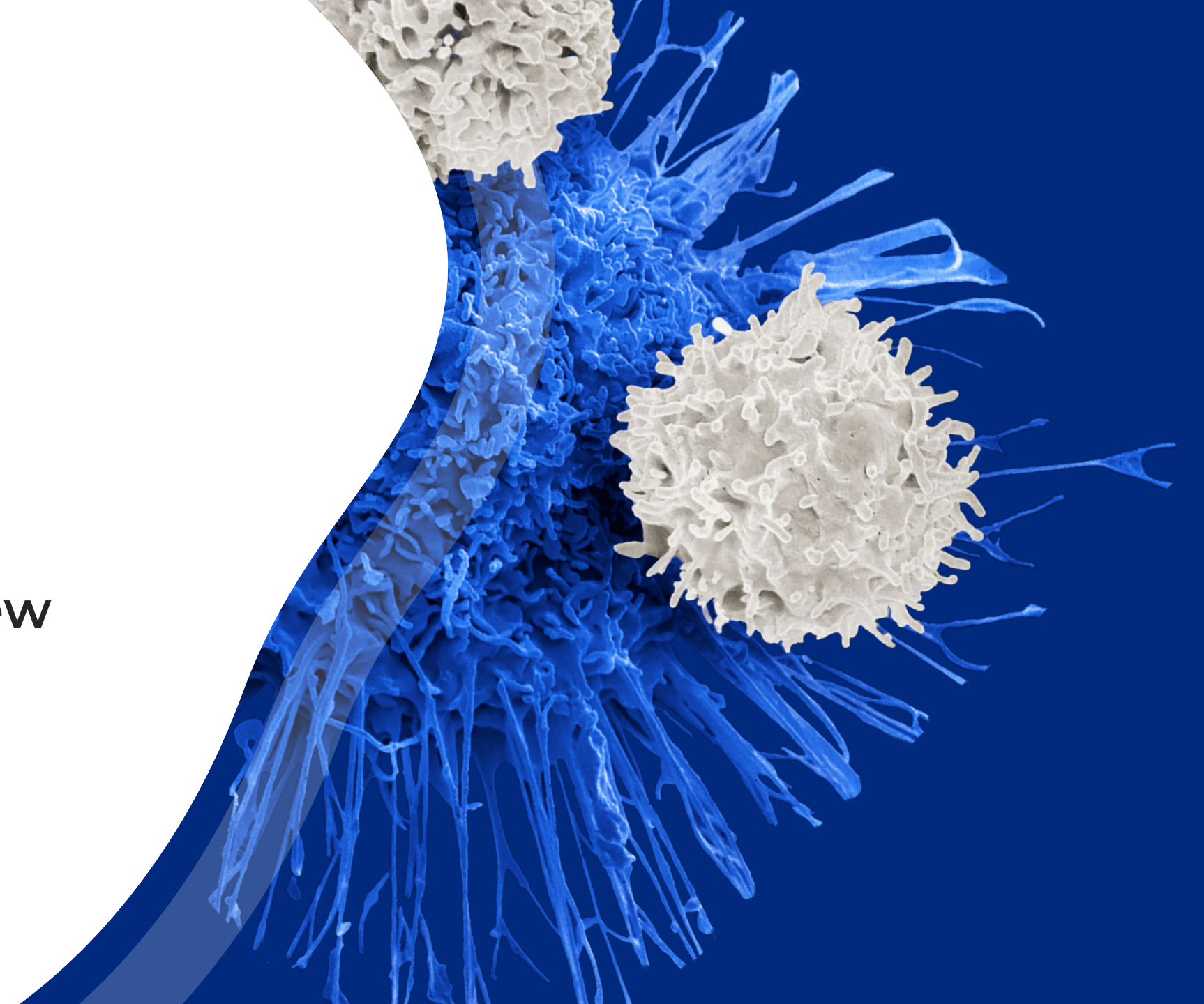
CENTURY THERAPEUTICS

Corporate Overview

January 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 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-19 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. 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.

Investment Thesis

Next generation platforms for iNK and gamma delta iT candidates
Foundational investments in iPSC technology, genetic editing, and manufacturing

Experienced team in R&D, immuno-oncology, manufacturing and commercialization
Exemplified by FDA clearance of Century's first IND for CNTY-101

Well capitalized with cash runway into 2026
Operational efficiencies designed to enable delivery on key milestones, clinical data

Finding operational efficiencies to extend the cash runway

Portfolio Prioritization

- Prioritization of key pipeline assets enabled by de-prioritizing further investment in CNTY-103
  - CNTY-107 (Nectin-4+ tumors), CNTY-102 (lymphomas) have BIC potential
  - Not overinvesting in any disease area

Operational efficiencies

- Realizing further synergies across the organization
  - Streamlining R&D lab operations in Philadelphia
  - While executing on key milestones

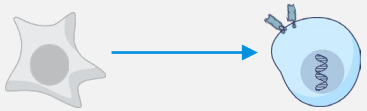
Cash runway extended into 2026 following reprioritization

CENTURY
THERAPEUTICS

iPSC Platform

Building a next generation allogeneic cell therapy platform

iPSC Reprogramming

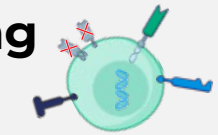


- Comprehensive collection of clinical grade lines (CD34+ HSC, αβ T cell, γδ T cell derived)

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

FUJIFILM Value from Innovation

Cellular Dynamics

iPSC license and collaboration agreement established in 2018

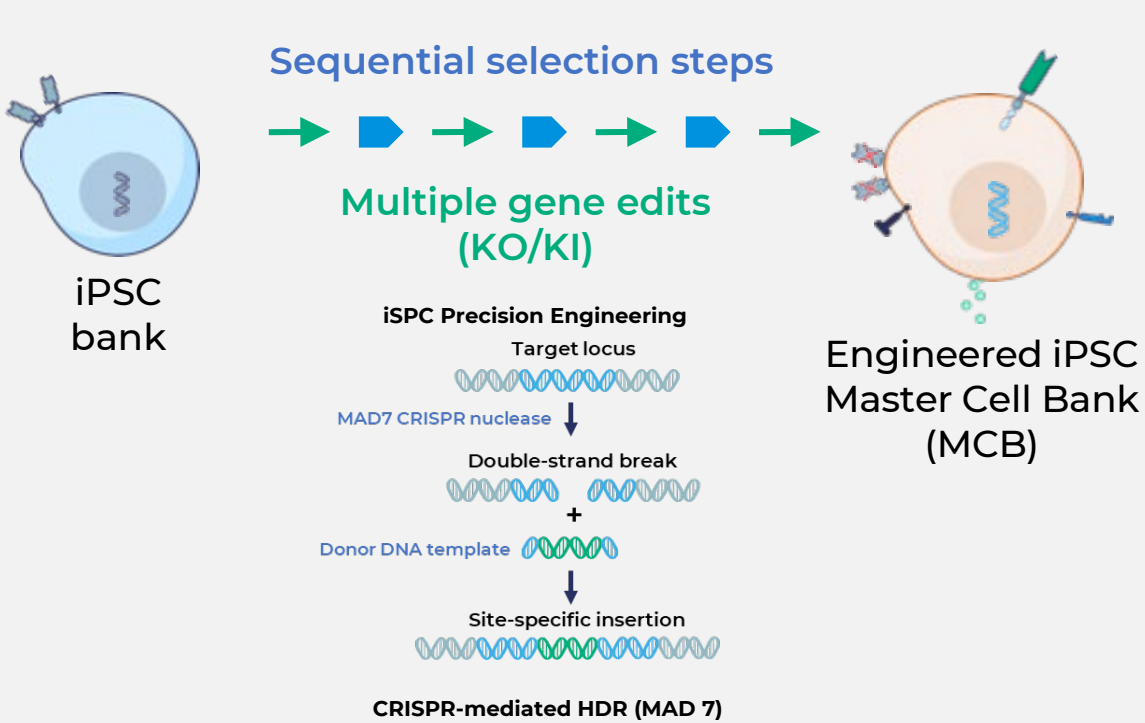
- Access to clinical grade iPSC lines
- Exclusive IP and know-how to generate immune effector cells using feeder-free methods (NK, T, Mac, DC)
- FCDI GMP manufacturing capacity for Century's product candidates
- Leveraging two decades of research & investment at University of Wisconsin and FCDI

CENTURY THERAPEUTICS

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 provides optionality and maximizes flexibility

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



Advantages of Century's Platform

Precise CRISPR mediated homology directed repair reduces off-target integration

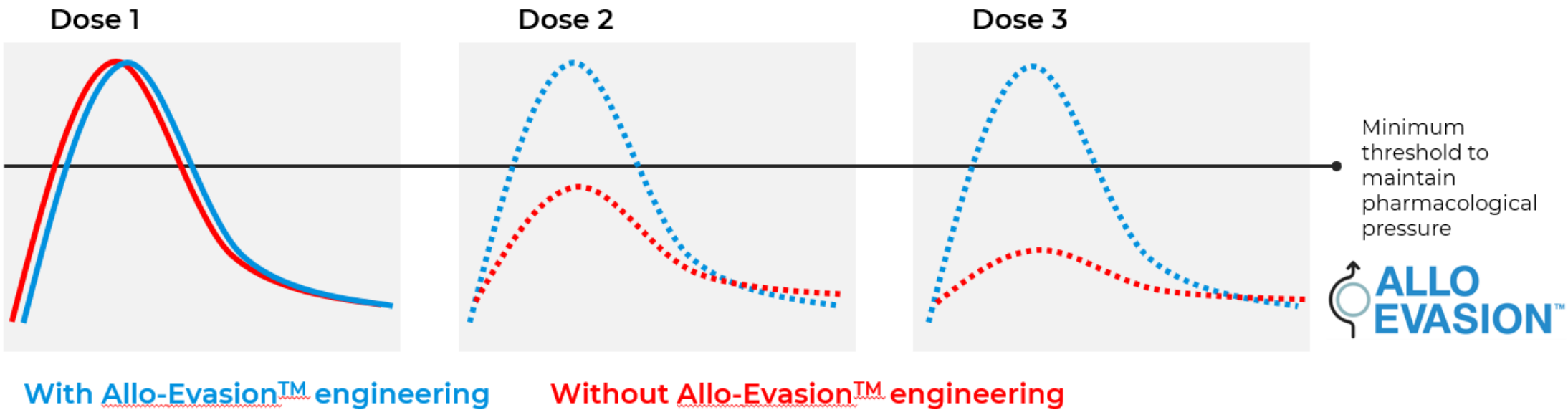
Stepwise and efficient gene editing **avoids risky multiplex modification** and structural variants

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

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

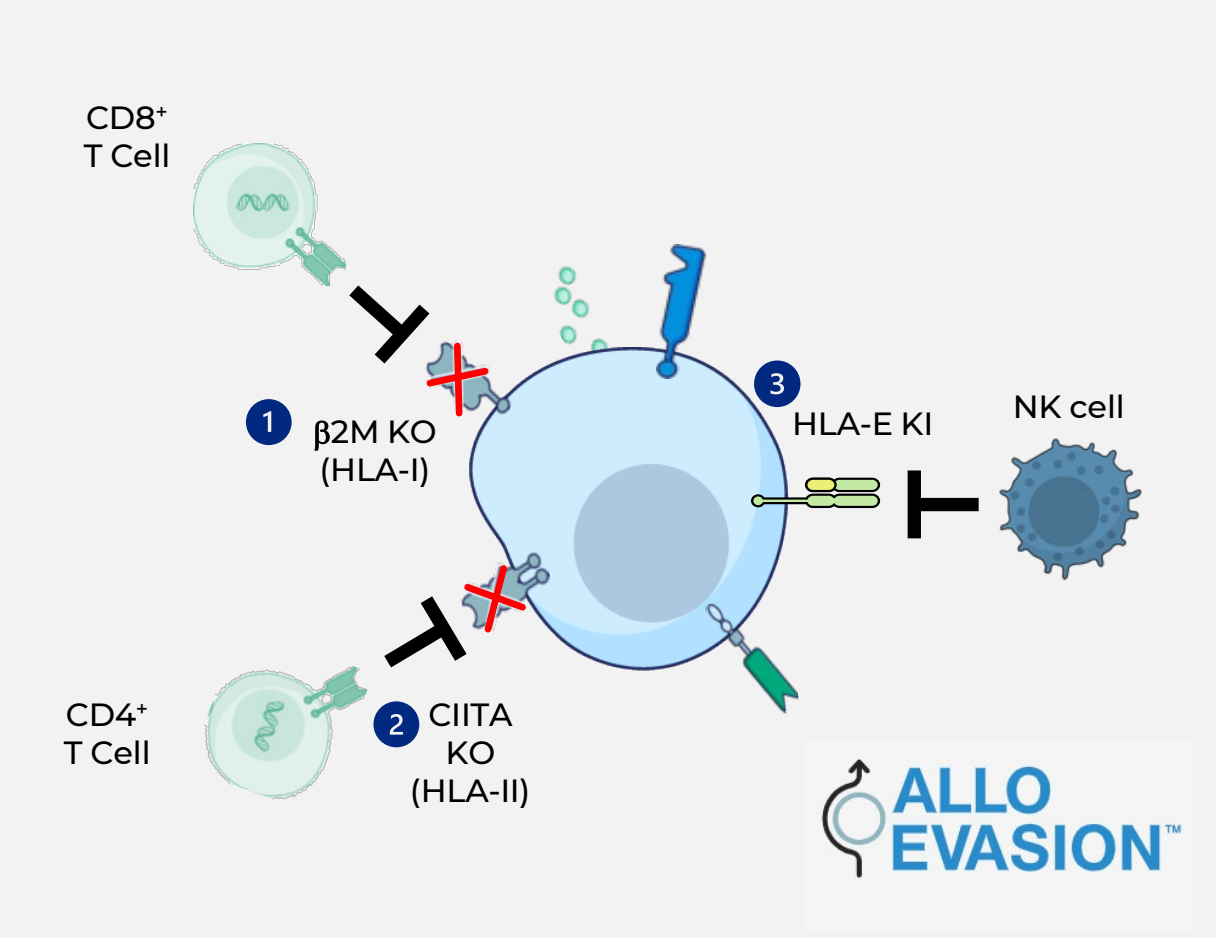
Potential to drive durable responses with engineering to resist immune rejection

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



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

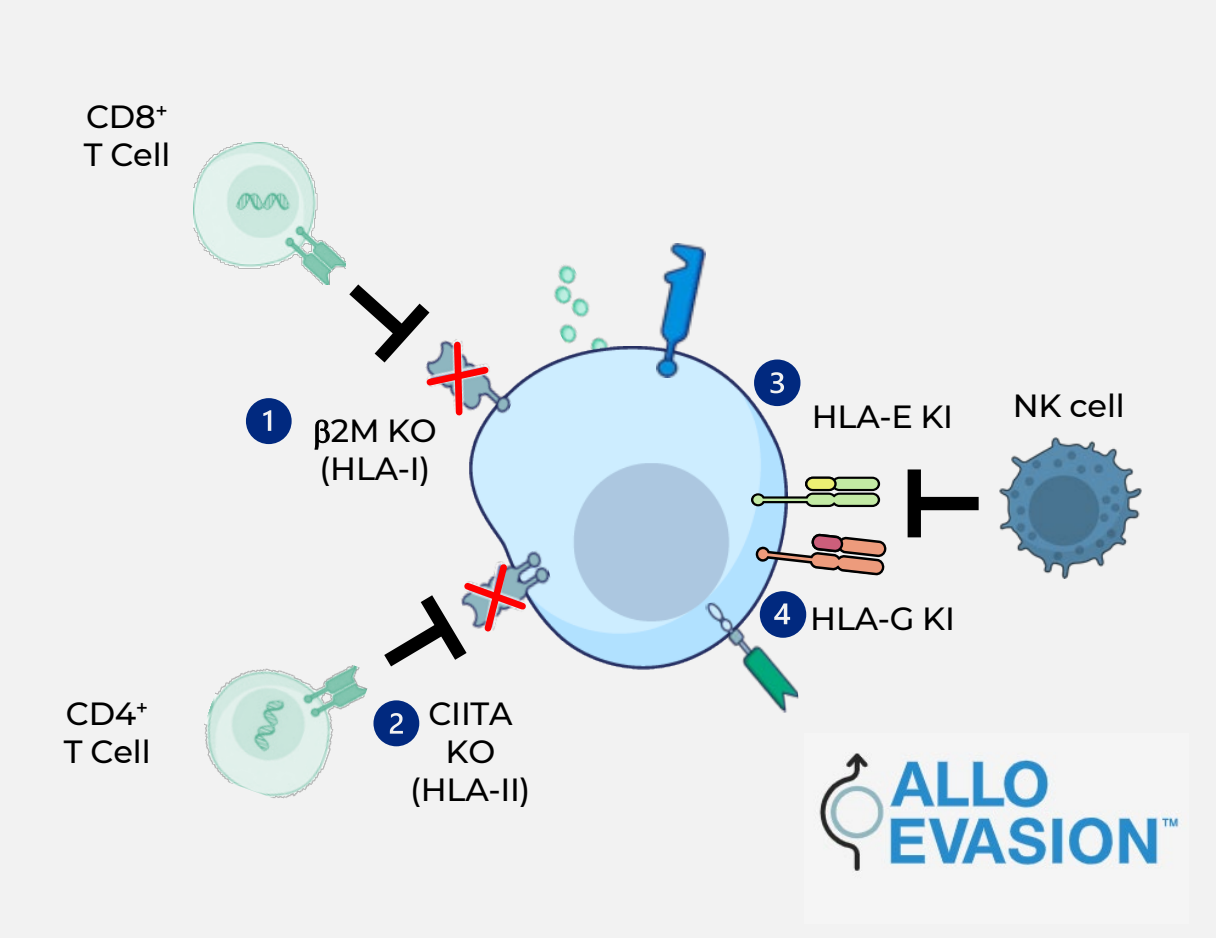
Allo-Evasion™ 1.0 designed to overcome 3 major pathways of host vs graft rejection



3 core edits disarm host cells from eliminating therapy

1. Deletion of 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

Allo-Evasion™ 3.0 Provides Additional Protection Against NK Cell Killing

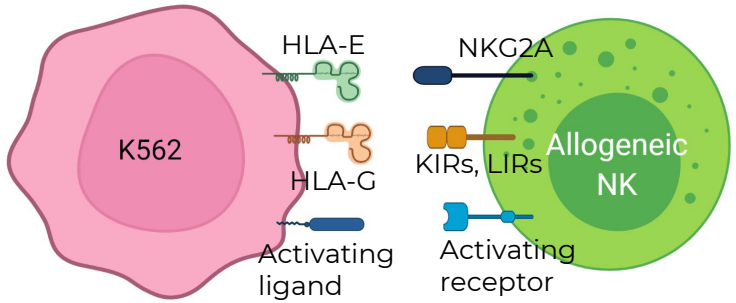


4 core edits disarm host cells from eliminating therapy

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 prevents killing by NK cells

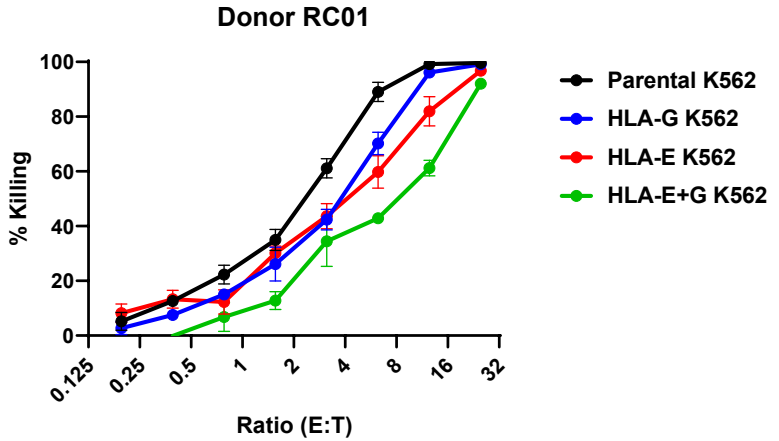
Expression of HLA-E + HLA-G further protects from NK cell killing

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

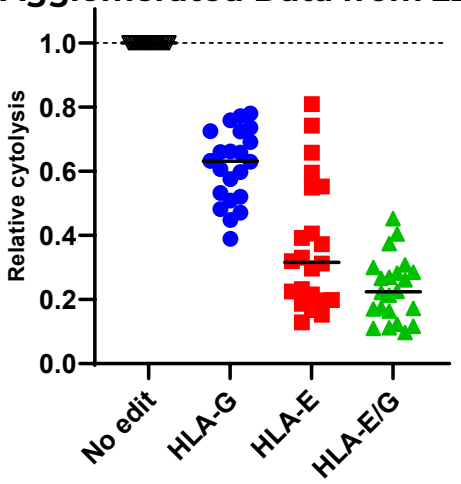


- HLA-E and HLA-G engage different receptors on NK cells including NKG2A, KIRs, and LIRs
- The expression of NKG2A, KIRs, and LIRs varies among NK cells from different donors

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



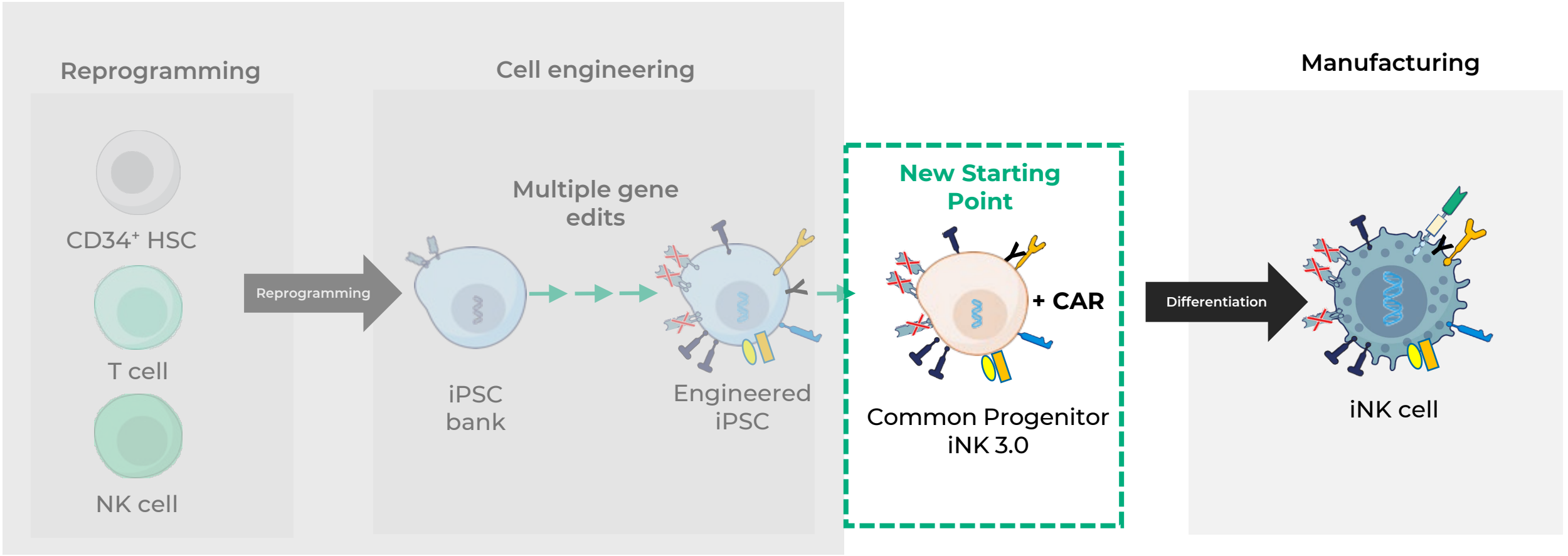
Agglomerated Data from 22 NK Cell Donors



CENTURY
THERAPEUTICS

Discovery

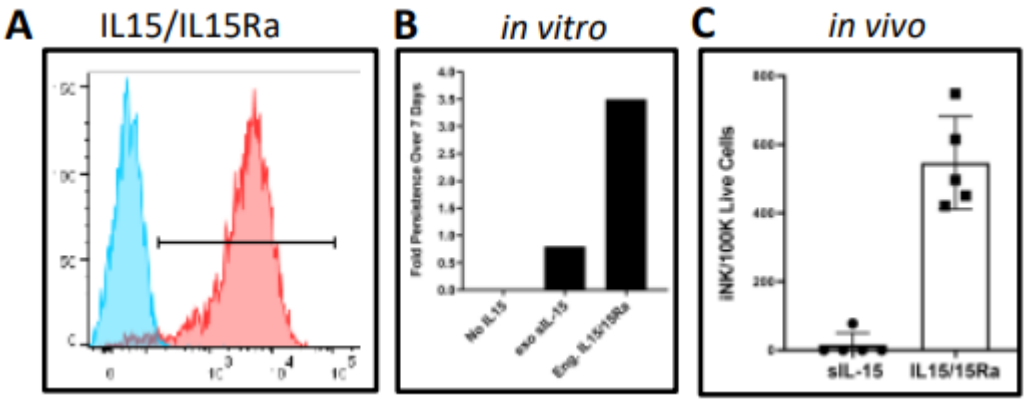
Common progenitor milestone enables cost, time efficiencies



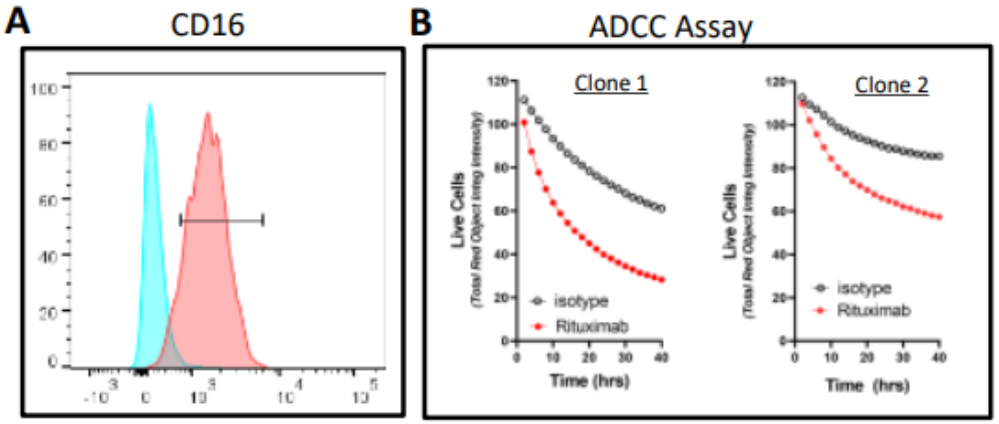
- iPSC cell bank with 12 core 3.0 gene edits introduced in 5 sequential steps
- Resets product development starting point: accelerates and de-risks development candidate selection

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

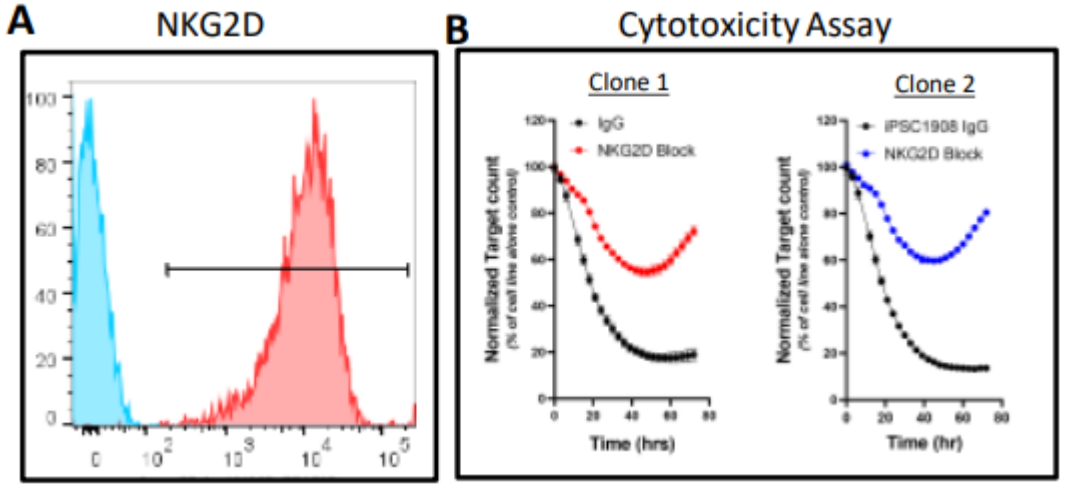
Engineering with IL15/IL15Ra shows increased persistence *in vitro* and *in vivo*



High affinity CD16 demonstrates enhanced ADCC activity



iNK cells engineered with NKG2D demonstrate enhanced tumor cell killing



Gurung, et al, SITC 2022

CENTURY THERAPEUTICS

Pipeline and Franchises

Updated pipeline

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

Solid Tumors Hematologic Tumors

Product	iPSC Platform	Targets	Indications	Discovery	Preclinical	Clinical	Collaborator
CNTY-101	iNK	CD19	B-Cell Malignancies				
CNTY-102	iT	CD19 + CD79b	B-Cell Malignancies				
CNTY-107	iT	Nectin-4	Solid Tumors				
Programs in Collaboration							
CNTY-104	iNK/iT	Multi-specific	Acute Myeloid Leukemia				Bristol Myers Squibb
CNTY-106	iNK/iT	Multi-specific	Multiple Myeloma				Bristol Myers Squibb
Research Programs							
Discovery	iNK/iT	TBD	Hematological / Solid Tumors				

Promise of allogeneic cell therapies in lymphoma intact

Large unmet need remains despite progress with autologous cell therapies

- ~25% of eligible patients receive CAR-T therapy[1]
- ~35% of patients achieve long-term remission even in earlier lines of therapy[1]

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

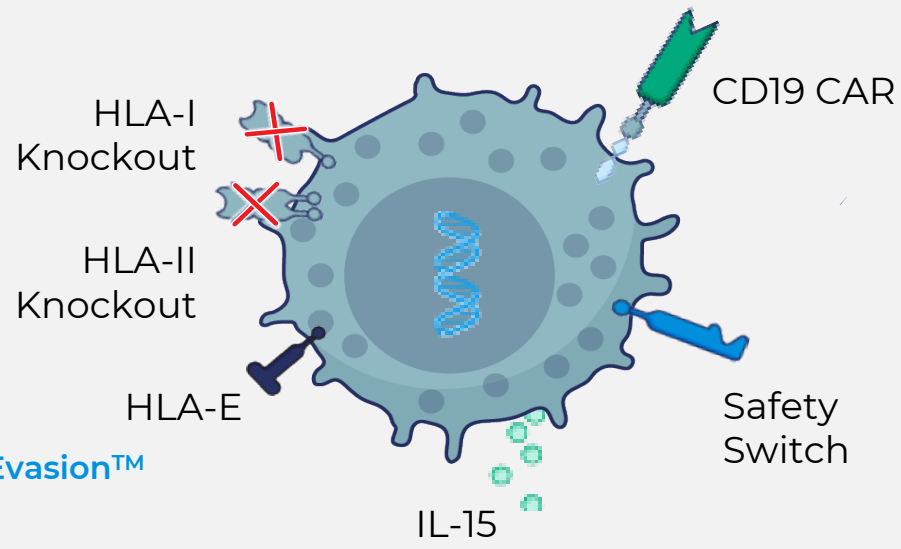
Goal to deliver more durable response rates vs autologous

- CNTY-101 is designed to protect cell product from rejection (Allo-Evasion™)
- Shift from “one and done” to finite repeat dosing to increase pharmacological pressure

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

CNTY-101: Differentiated next-gen CD19 targeted product

CNTY-101



Differentiating features:

First cell therapy product candidate designed to avoid all major pathways of host vs graft rejection to realize potential of repeat dosing

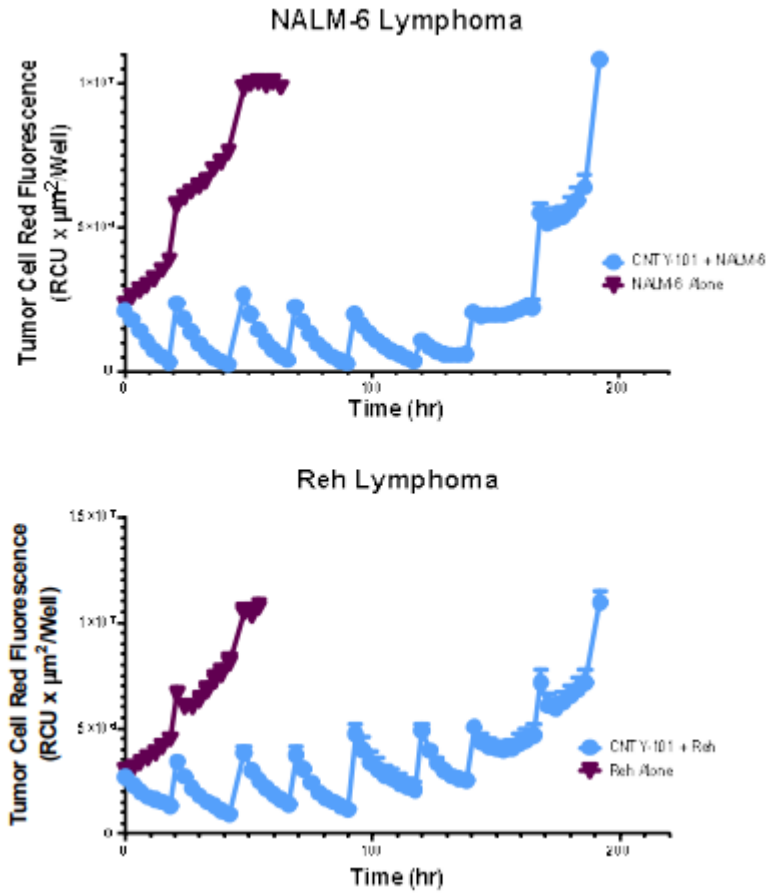
Potential to exceed bar set by autologous and deliver durable responses

Vision to eliminate need for lymphodepletion with subsequent cycles to increase tolerability and ease of outpatient administration

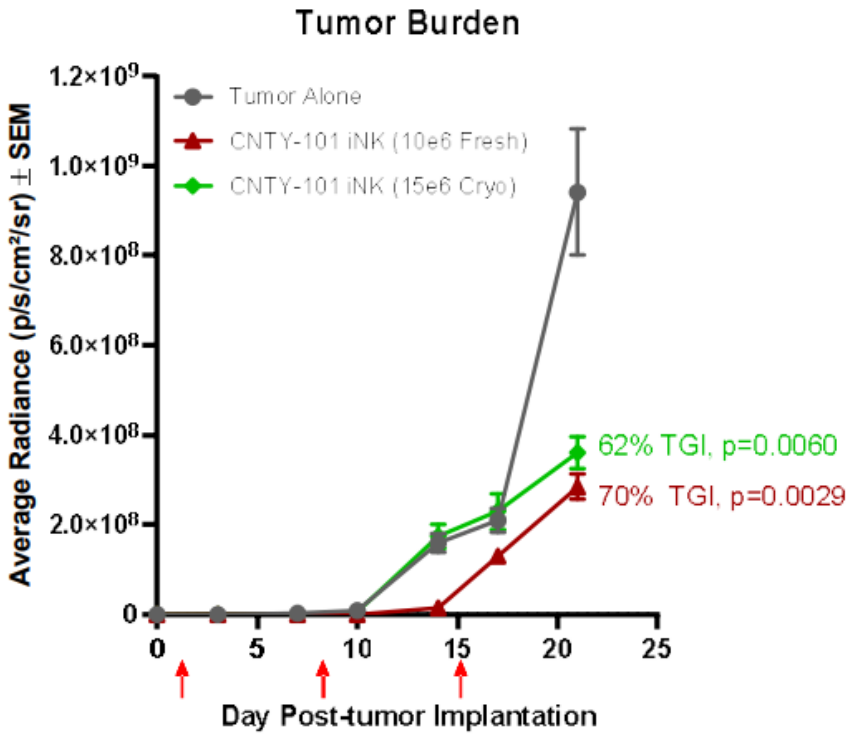
Currently enrolling patients with relapsed/refractory CD19+ B-cell malignancies

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

In Vitro Serial killing assay



Robust activity against lymphoma xenograft



Borges, et al, ASH 2021

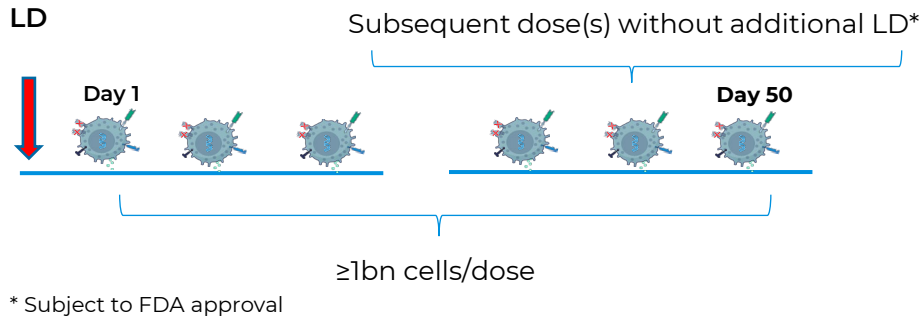
ELiPSE-1: First-in-Human Study CNTY-101

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 multiple doses per cycle



* Subject to FDA approval

Study will assess:

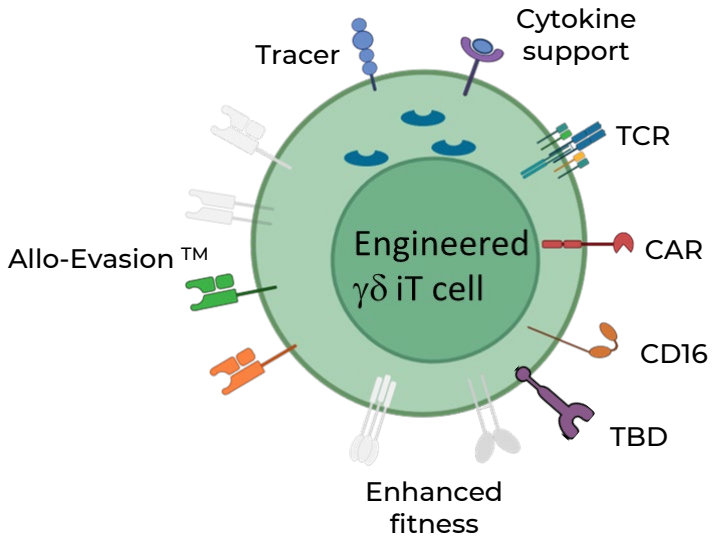
Impact of Allo-Evasion™ on iNK cell persistence and PK after multiple dosing (Schedule B)

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

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

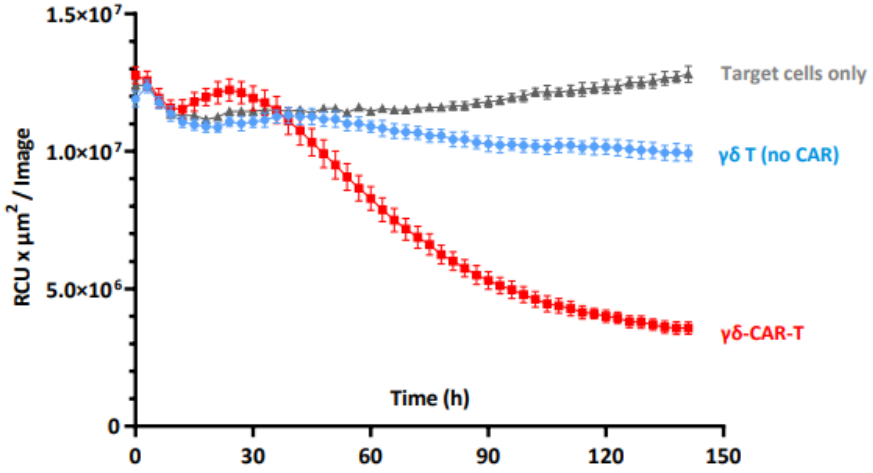
Winning in Solid Tumors

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

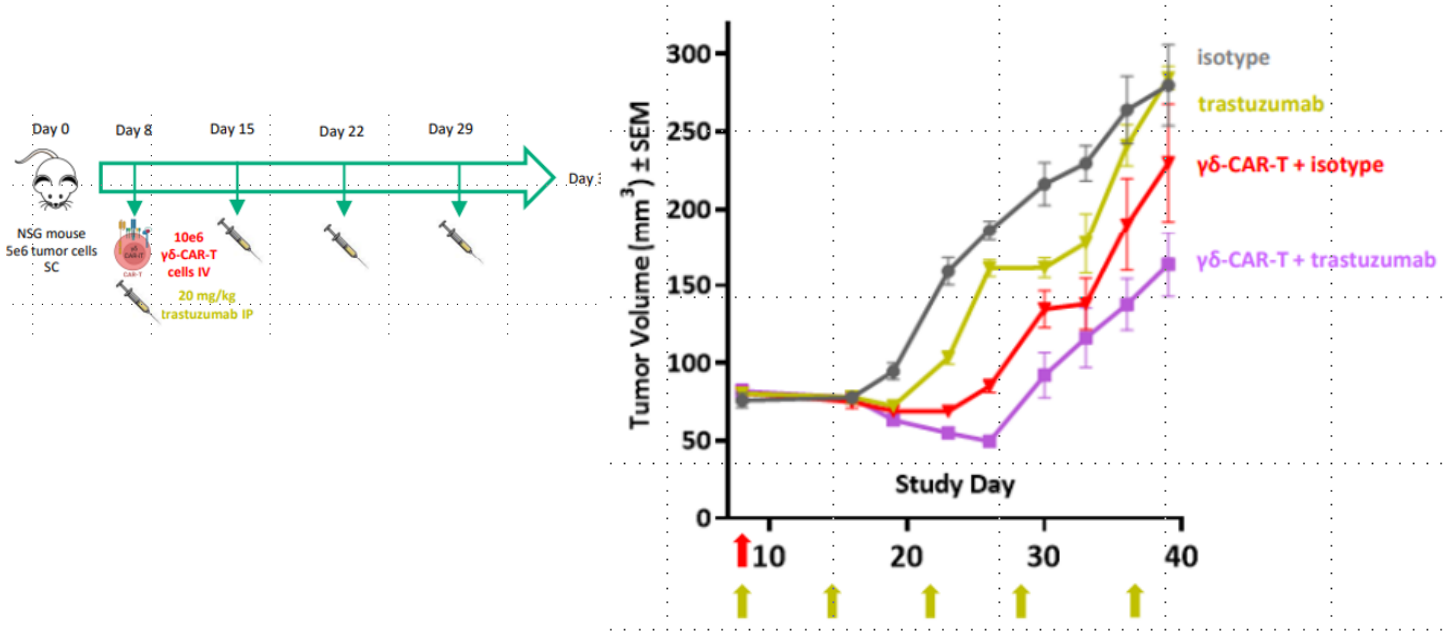


iPSC-derived GD T cells effective at tumor control as monotherapy and in combination with antibody

γδ-EGFR-CAR-T cells demonstrate significant CAR killing of ovarian spheroids



γδCAR-T demonstrate additive efficacy in combination with trastuzumab

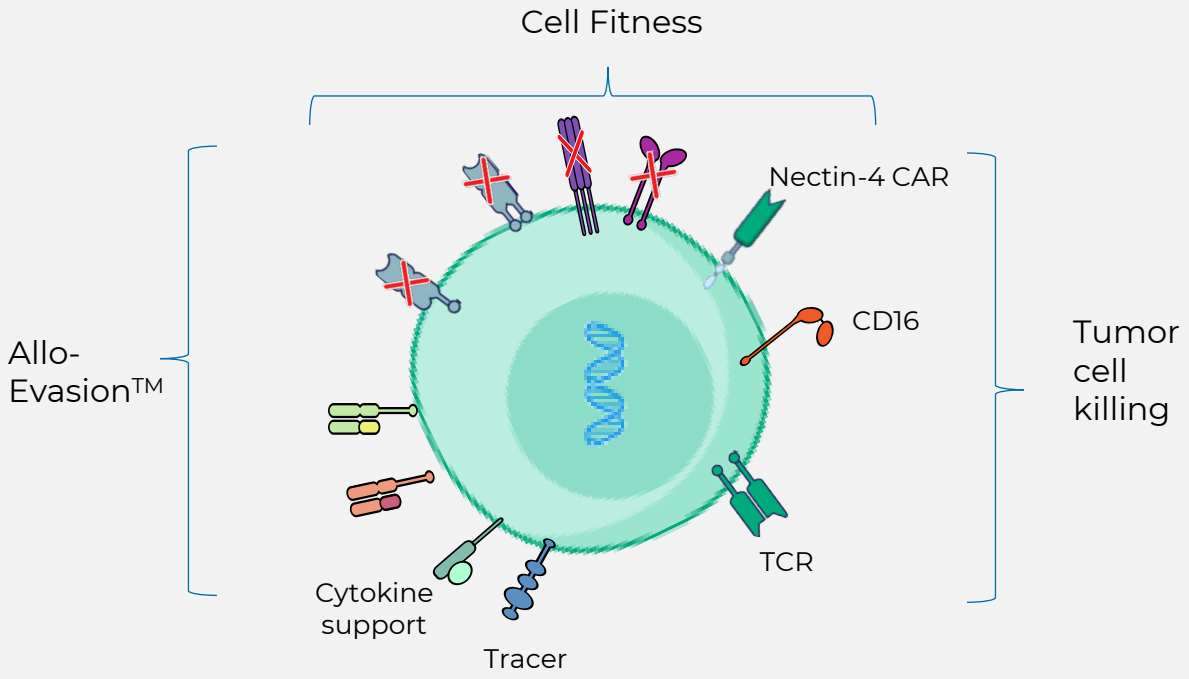


Treatment	% TGI	Significance
trastuzumab	0	P=0.9980
γδ-CAR-T	18	P=0.7073
γδ-CAR-T + trastuzumab	42	P=0.0358

TGI = Tumor Growth Inhibition

Millar, et al, SITC 2022

CNTY-107: First in Class Nectin-4 Targeted GD iT Cell Therapy



CNTY-107

Illustrative construct

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]

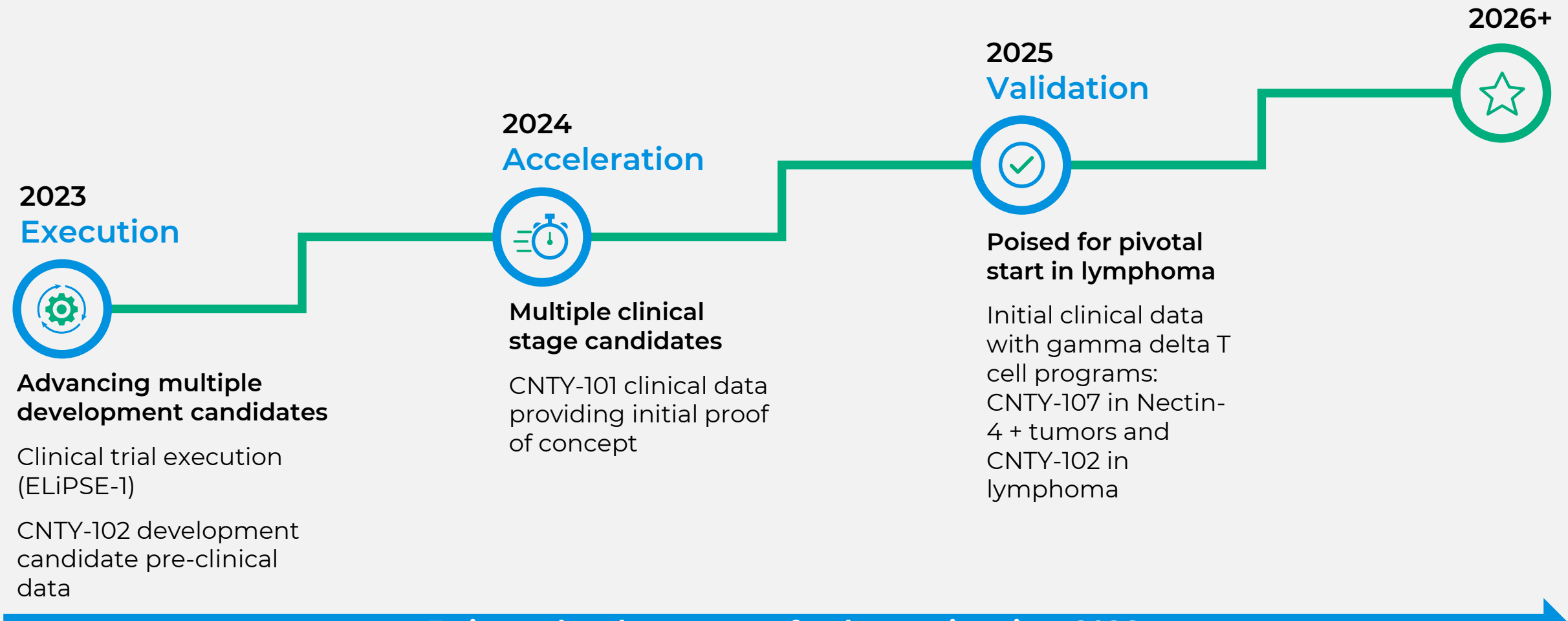
GD iT allogeneic therapies provide potential to improve upon ADC toxicity profile and efficacy

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

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

Strategy and 3-year vision for growth

Delivering on potential for allogeneic cell therapies by exceeding efficacy, safety and logistics of autologous approaches



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 facility
Fully operational, enabling improved and faster product iteration

Financial Strength
Cash runway into 2026, Ended 3Q22 with cash, cash equivalents, and investments of $395.3M

Emerging pipeline of candidates
Product engine anticipated to deliver multiple INDs over the next 3 years

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

~165
Employees including experienced leaders and entrepreneurs