



CENTURY
THERAPEUTICS

21ST ANNUAL NEEDHAM VIRTUAL HEALTHCARE CONFERENCE

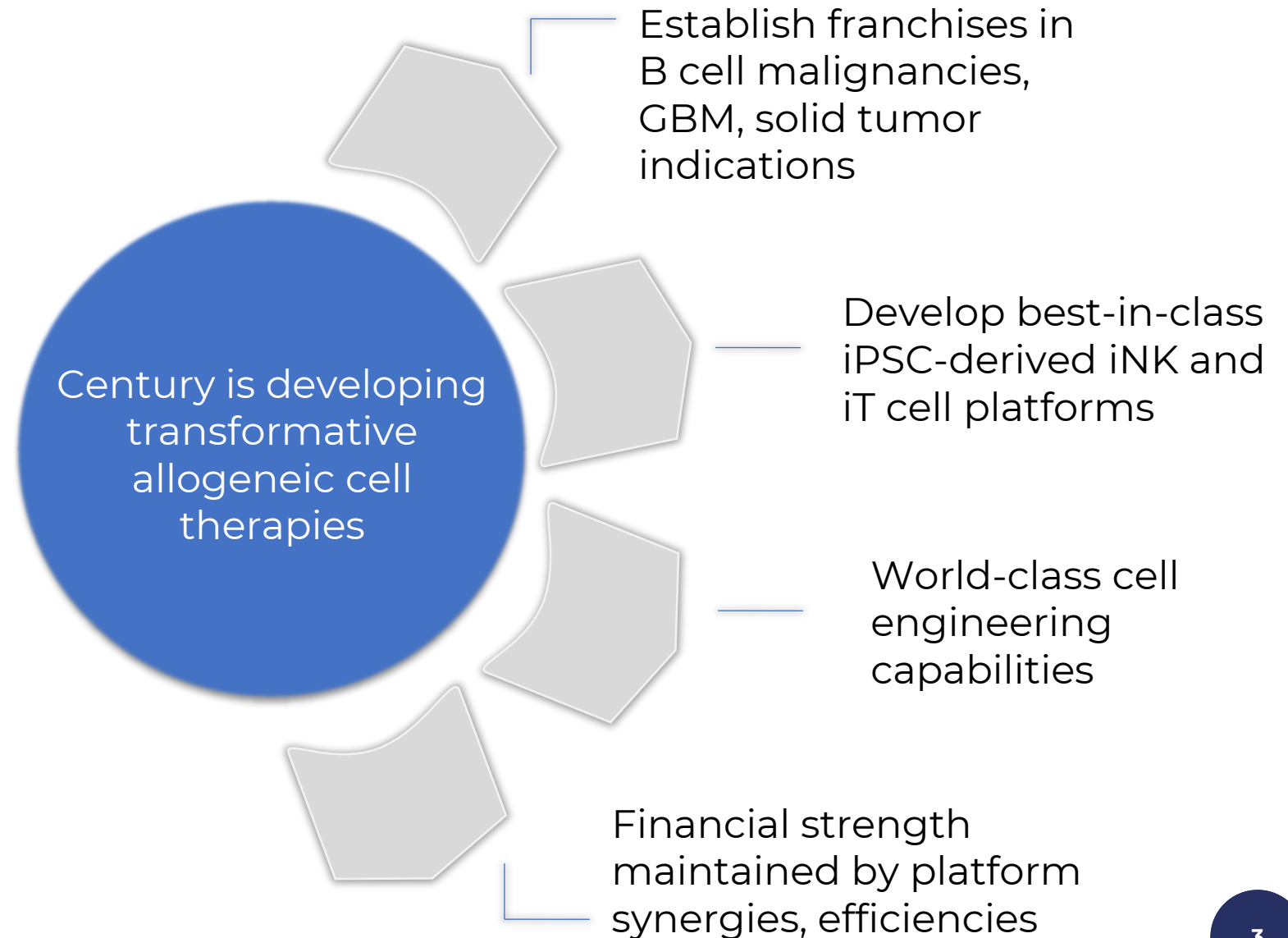
April 13, 2022

FORWARD-LOOKING STATEMENTS

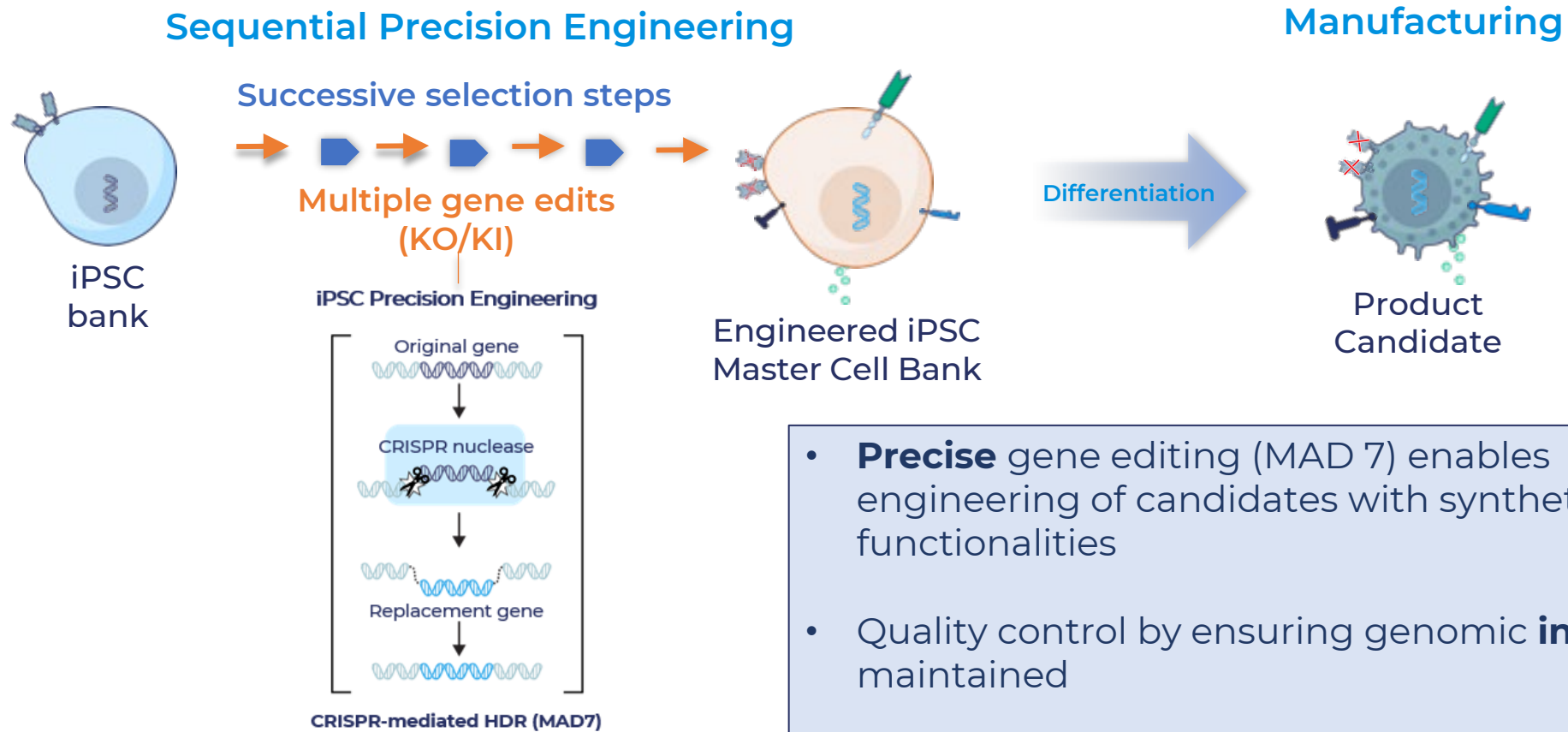
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Future Vision

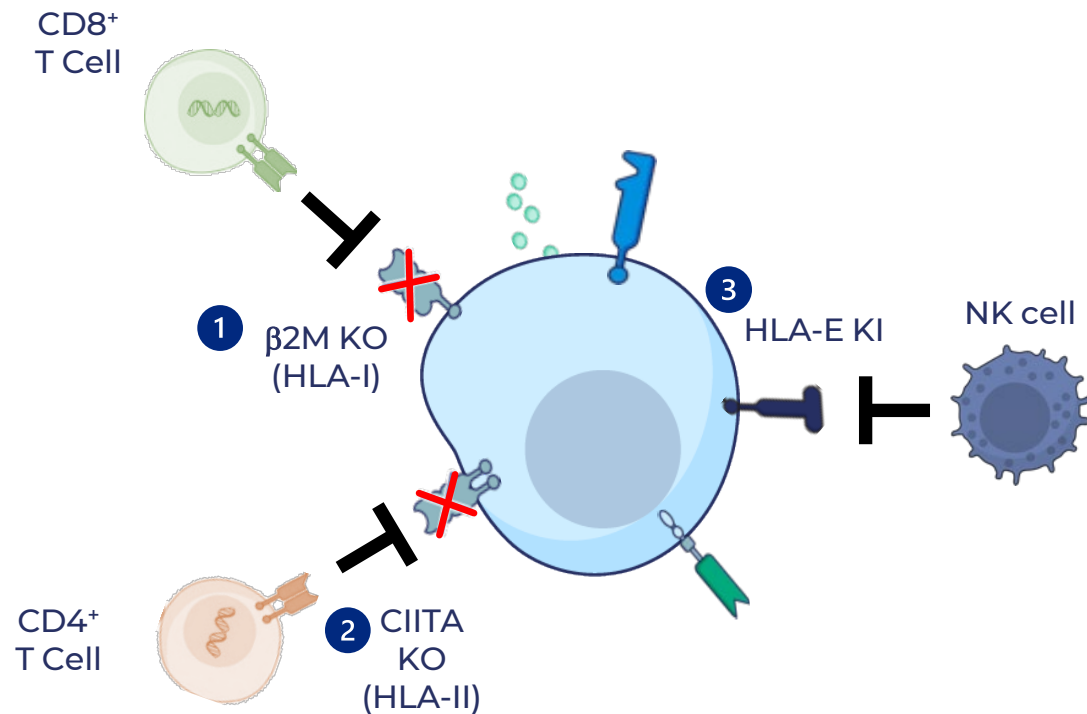


PRECISION CRISPR MAD7 GENE EDITING OF IPSC CELLS UNLOCKS TRANSFORMATIONAL POTENTIAL



- **Precise** gene editing (MAD 7) enables engineering of candidates with synthetic functionalities
- Quality control by ensuring genomic **integrity** is maintained
- Clonal selection of MCB for **homogenous** products, **scalable** process

ALLO-EVASION™ 1.0 DESIGNED TO OVERCOME THREE MAJOR PATHWAYS OF HOST VS GRAFT REJECTION

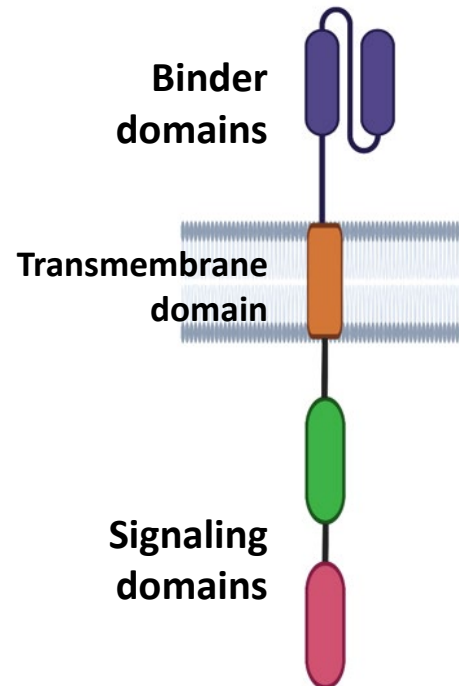


Core edits

- 1 Deletion of β 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

CENTURY'S PROTEIN SCIENCES ENABLES ALL ASPECTS OF PROTEIN ENGINEERING OF OUR PRODUCT CANDIDATES

CAR Structure



CAR Engineering

- **Enable fit-for-purpose CAR assembly**
 - Multiple CAR formats for single- and multi-specific CARs
- **CAR Binder Discovery**
 - Century Therapeutics' proprietary VHH library
 - Partnerships with Distributed Bio and LakePharma
- **Signaling Domains**
 - Signaling domains specifically optimized for iNK and iT cells

Transgene Engineering

- Allo-Evasion molecules
- Safety switch
- Cytokines
- Chimeric proteins

CRISPR-MAD7 Protein Engineering

- Protein optimization, production, and characterization

STATE-OF-THE ART MANUFACTURING

DESIGNED TO POSITION CENTURY AS LEADER
IN iPSC-BASED CELL THERAPY FOR CANCER



Century's multi-suite facility
Branchburg, NJ

- cGMP manufacturing facility expected to be operational in 2022
 - 53,000 ft² facility
- Capable of production of NK and T cells, as well as other cell types

Advantages of investing in manufacturing capabilities expertise

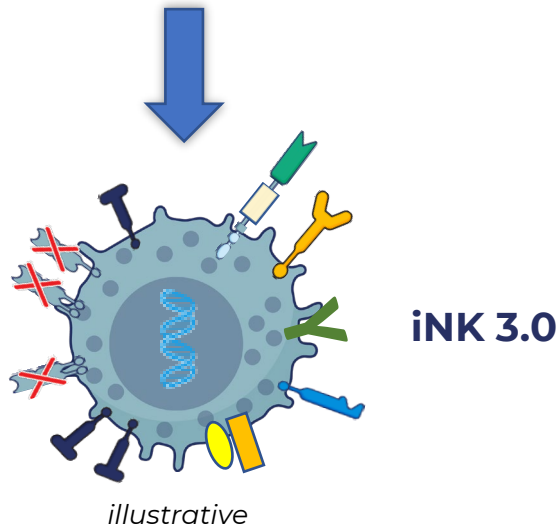
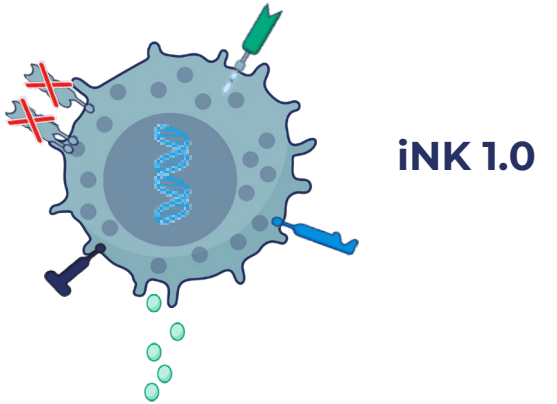
- Fully integrated analytical and process development and manufacturing
- More effectively implement process and product changes
- Potentially accelerate clinical development of commercial product
- Potential to achieve economies of scale

CELL ENGINEERING ENABLES RAPID PRODUCT ITERATION

Century's Platform allows for potentially transformative product evolution

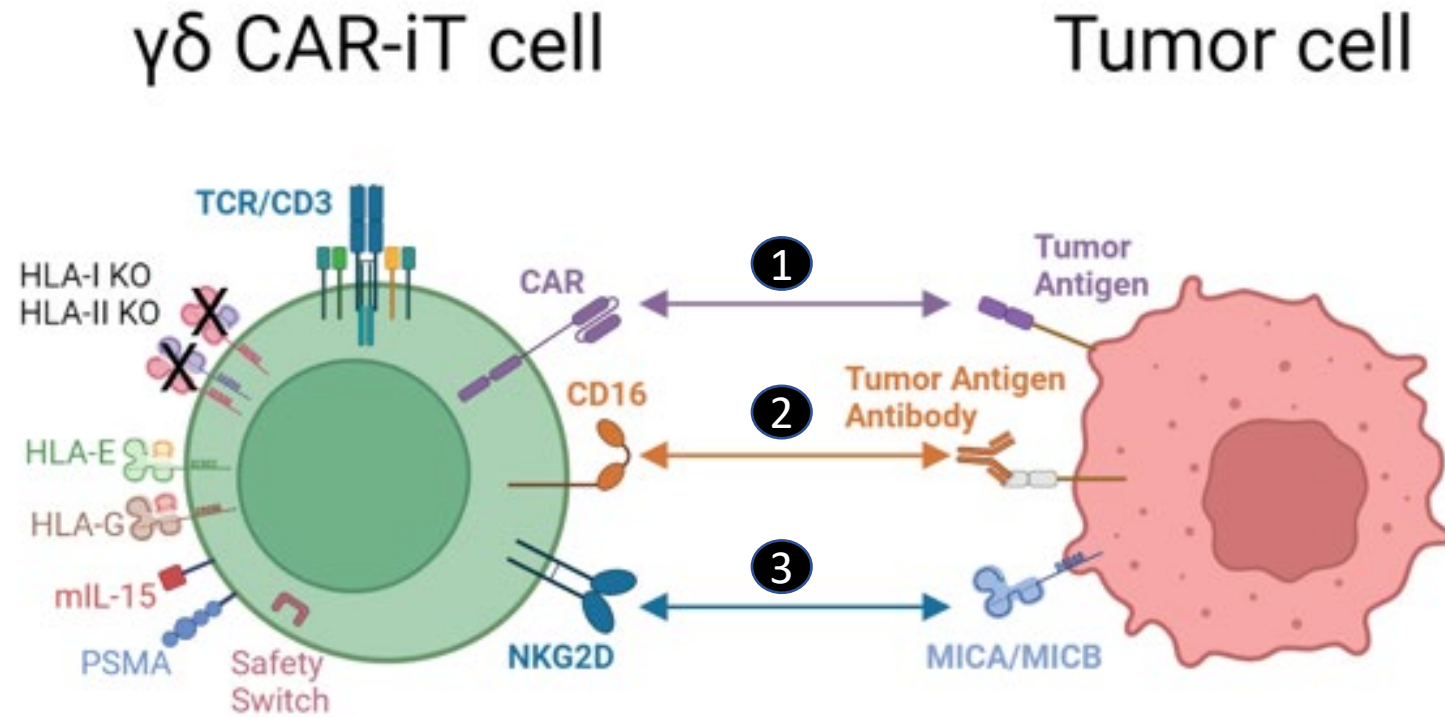
Proposed Feature	CNTY-101 iNK 1.0	CNTY-103 iNK 2.0	iNK 3.0 Illustrative
Cytokine support	Soluble IL-15	mbIL-15	mbIL-15
Innate Activity	+	++ (NKG2A KO)	++ (NKG2A KO)
Undisclosed			✓
PET tracer			✓
Allo-Evasion			
HLA-I KO	✓	✓	✓
HLA-II KO	✓	✓	✓
HLA-E KI	✓	✓	✓
Undisclosed			✓
# of edits	6	6	12
KO	2	3	4
Site-specific KI	4	3	8

Fit for purpose tailored functionality



CENTURY'S FIRST GENERATION $\gamma\delta$ CAR-iT CELLS

MULTIPLE BUILT-IN PATHWAYS FOR TUMOR KILLING

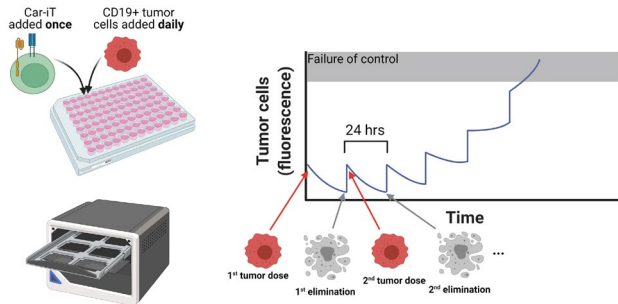


PATHWAYS FOR POTENTIAL TUMOR KILLING

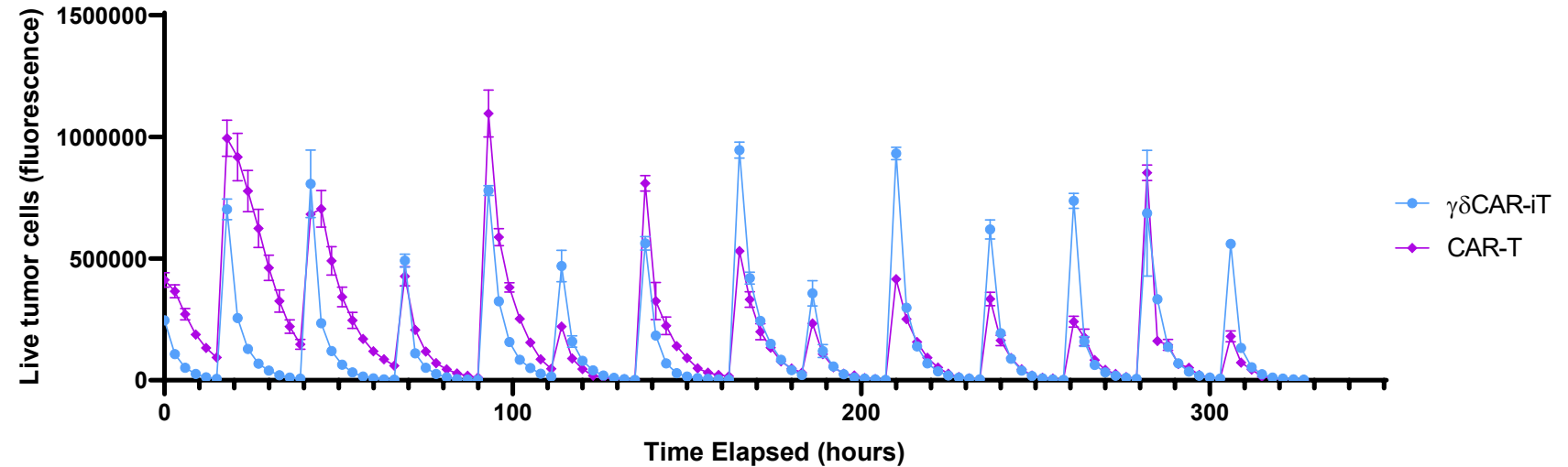
1. CAR-mediated killing
2. ADCC (Antibody-dependent cellular cytotoxicity)
3. Innate-receptor mediated killing (NKG2D, others)

$\gamma\delta$ CAR-iT CELLS KILL LYMPHOMA CELLS THROUGH MULTIPLE ROUNDS OF KILLING WITHOUT REACHING EXHAUSTION

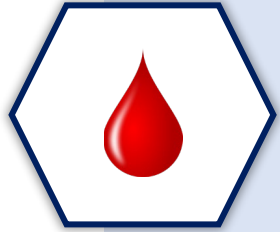
Serial Killing Assay Setup



Serial Killing of CD19⁺ Lymphoma Cells by $\gamma\delta$ CAR-iT cells



CENTURY'S EMERGING FRANCHISES



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

Potentially first product candidate to enter the clinic with edits designed to avoid all major pathways of rejection

CNTY-102 provides optionality to address additional subtypes / use in combination



Glioblastoma

- **CNTY-103:** Multi-specific (CD133+ EGFR) CAR iNK for recurrent GBM
- **Follow-on candidate**

Multi-tumor antigen targeting addresses heterogeneity in GBM tumor cells

Exploring additional tumor antigens and TME modulation features



Solid tumors

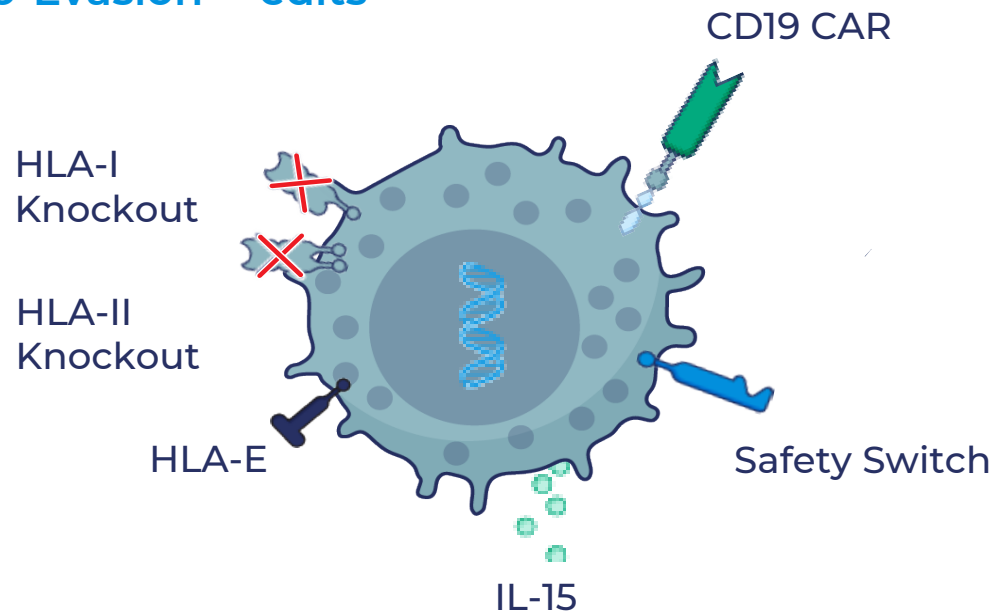
- **Future candidate** expected to be announced 4Q 2022

Leverage $\gamma\delta$ iT platform to target challenging solid tumors

CNTY-101: NEXT GENERATION CD19 TARGETED PRODUCT

HIGHLY DIFFERENTIATED PROFILE

Allo-Evasion™ edits



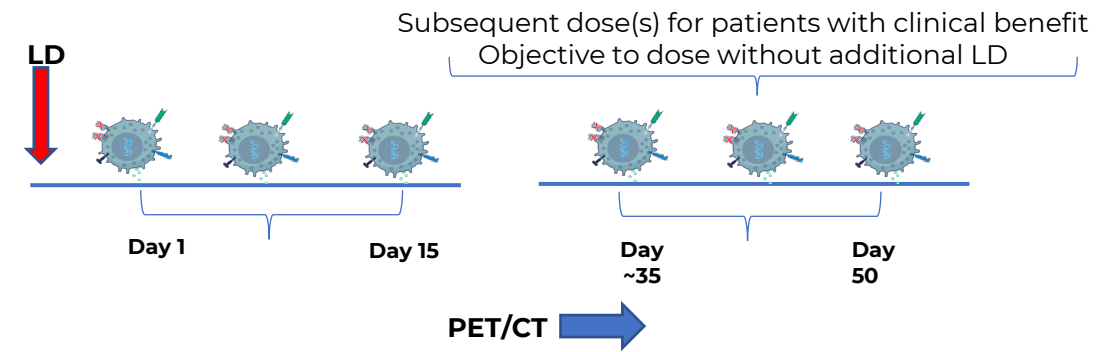
CNTY-101

First cell product candidate with 6 gene edits introduced with CRISPR-HDR

ELIPSE-1: PHASE 1 STUDY DESIGN*

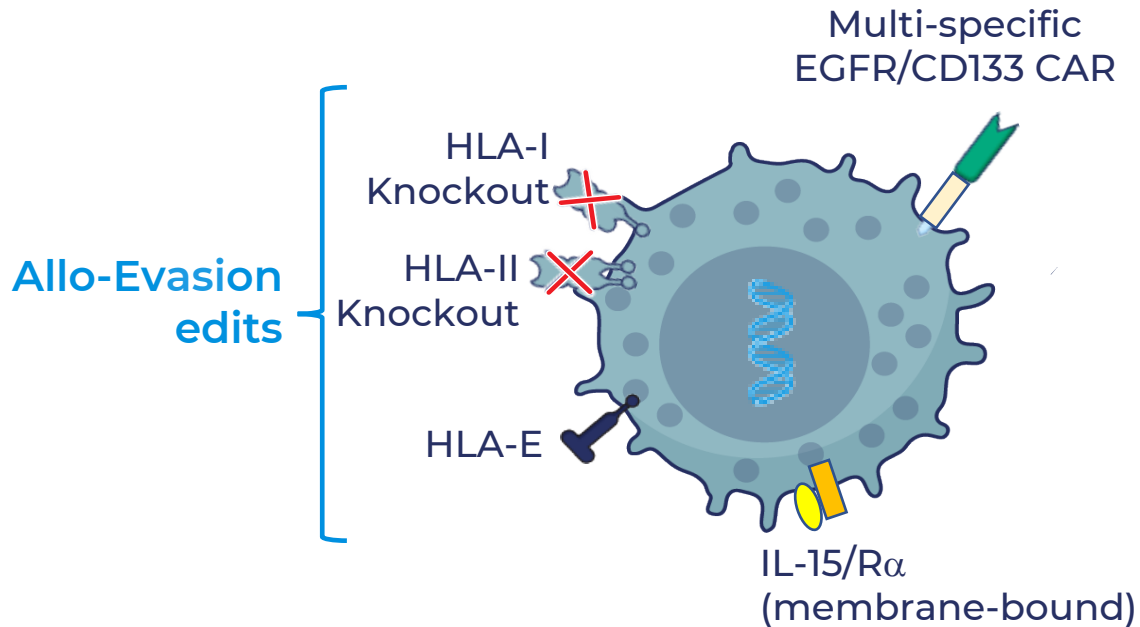
- Explore 1 to 2 cycles up to 6 doses with single LD conditioning
- Effect of Allo-Evasion on iNK persistence after multiple doses
 - IND expected mid-2022 to advance CNTY-101 into Phase 1 clinical trial

ELIPSE-1 Schedule B



* Subject to FDA approval

CNTY-103: FIRST PROGRAM IN CNS MALIGNANCIES



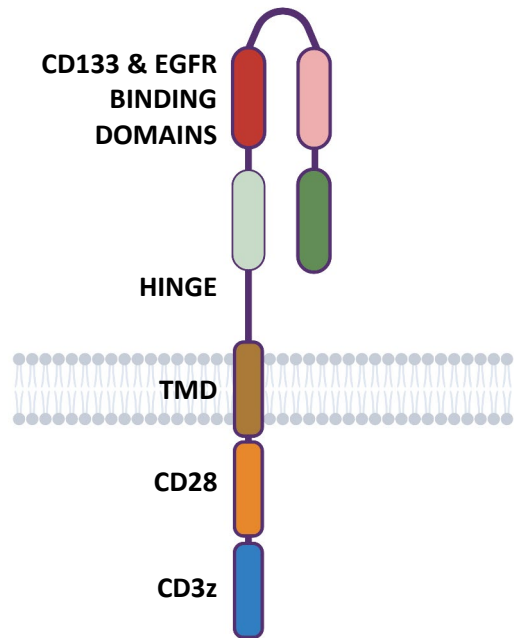
- **Targeting EGFR+ GBMs:** Provides better coverage intended to ensure maximum tumor clearance
- **Targeting CD133+ GBMs:** Clears functionally relevant treatment-resistant tumor cells

UNIQUELY POSITIONED TO ADDRESS CHALLENGES OF GBM

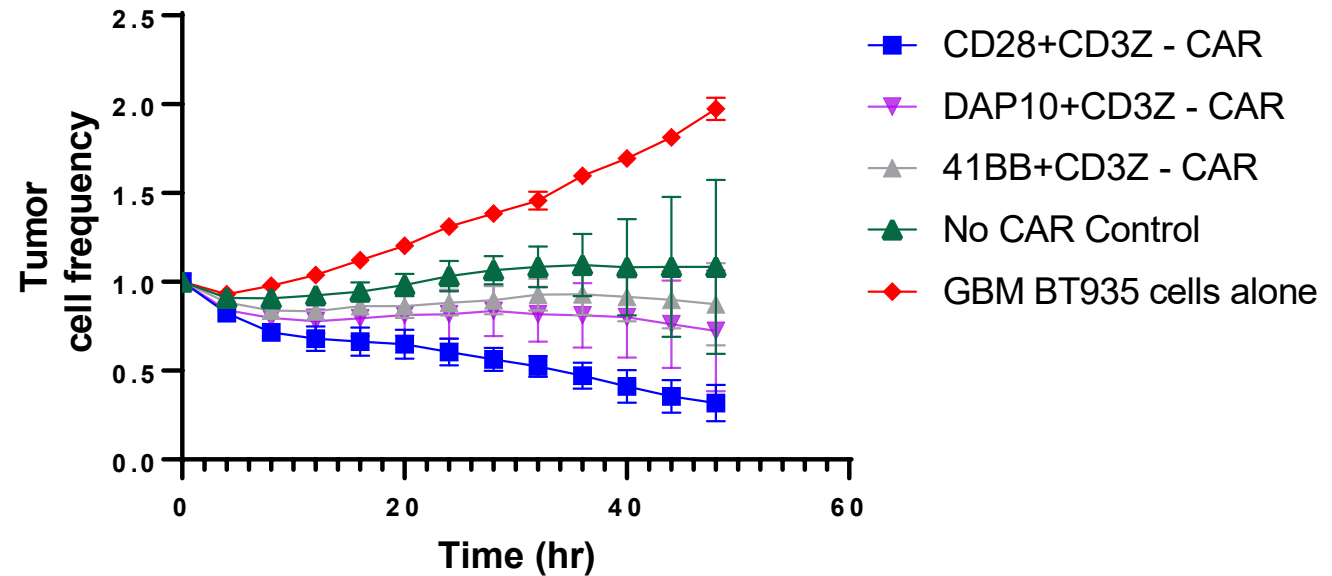
Challenge	Century's Solution
Trafficking	Local delivery with Ommaya reservoir
Heterogeneity	Targeting EGFR / EGFRvIII and CD133 (functional marker of treatment-resistant GBM cells)
Toxicity	Potentially minimize risks like CRS with iNK
Persistence	Potential to dose as needed

MULTIPLE CAR DESIGNS AND SIGNALING DOMAINS WERE INVESTIGATED TO DEVELOP THE CD133xEGFR CAR

CNTY-103 CAR CD133xEGFR










Comparison Of The Cytotoxic Activity Of Multiple CD133xEGFR CAR Constructs Engineered With Different Signaling Domains



PIPELINE

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

Product	iPSC Platform	Targets	Indications	Expected IND Submission	Discovery	Preclinical	Clinical	Collaborator
CNTY-101	iNK	CD19	B-Cell Malignancies	Mid 2022				
CNTY-103	iNK	CD133 + EGFR	Glioblastoma	2023				
CNTY-102	iT	CD19 + CD79b	B-Cell Malignancies	2024				
CNTY-104	iNK/iT	Multi-specific	Acute Myeloid Leukemia	2024				 Bristol Myers Squibb
CNTY-106	iNK/iT	Multi-specific	Multiple Myeloma	2024				 Bristol Myers Squibb

 Solid Tumors  Hematologic Tumors

CENTURY THERAPEUTICS' UNIQUE INVESTMENT OPPORTUNITY

- Well capitalized with cash runway into 2025
 - Financial strength maintained by operational synergies
- Comprehensive end-to-end allogeneic platform
 - iPSC derived iNK and iT cells, world-class gene editing, protein engineering and manufacturing
- CNTY-101 IND submission on track for mid-2022
 - CD19 targeted cell product designed to avoid 3 pathways of host rejection
- CNTY-103 IND enabling activities to initiate in 2022
 - Century's first solid tumor candidate for GBM
- Experienced partner on board to tackle challenging malignancies
 - Bristol-Myers Squibb brings expertise in oncology and hematology



THANK YOU