

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 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): June 14, 2022

SANA BIOTECHNOLOGY, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-39941
(Commission
File Number)

83-1381173
(IRS Employer
Identification Number)

**188 East Blaine Street, Suite 400
Seattle, Washington 98102**
(Address of principal executive offices, including Zip Code)

Registrant's telephone number, including area code: (206) 701-7914

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:

- 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(s) | Name of each exchange on which registered |
|--------------------------------------------|-------------------|-------------------------------------------|
| Common Stock, \$0.0001 par value per share | SANA | The 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.

Sana Biotechnology, Inc. (the “Company”) intends to discuss an updated corporate presentation (the “Corporate Presentation”) at the Goldman Sachs 43rd Annual Global Healthcare Conference on June 14, 2022. A copy of the Corporate Presentation is furnished as Exhibit 99.1 to this Current Report on Form 8-K (this “Current Report”) and is incorporated by reference herein.

By furnishing the information in this Item 7.01 of this Current Report, including Exhibit 99.1, the Company makes no admission as to the materiality of such information. The information contained herein is intended to be considered in the context of the Company’s filings with the U.S. Securities and Exchange Commission (the “SEC”) and other public announcements that the Company makes, by press release or otherwise, from time to time. The Company undertakes no duty or obligation to publicly update or revise the information contained in the Corporate Presentation, although it may do so from time to time as its management believes is appropriate. Any such updating may be made through the filing of other reports or documents with the SEC, through press releases or through other public disclosure.

In accordance with General Instruction B.2 of Form 8-K, the information furnished with this Current Report, including Exhibit 99.1, shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (“Exchange Act”), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference into any other filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

See the Exhibit Index below, which is incorporated by reference herein.

EXHIBIT INDEX

| Exhibit Number | Description |
|---------------------------|-----------------------------------------------------------------------------|
| 99.1 | Corporate Presentation dated June 14, 2022 |
| 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 thereunto duly authorized.

Sana Biotechnology, Inc.

Date: June 14, 2022

By: _____ /s/ James J. MacDonald
James J. MacDonald
Executive Vice President and General Counsel

Corporate Presentation

June 2022



Cautionary Note Regarding Forward-Looking Statements

This presentation contains forward-looking statements about Sana Biotechnology, Inc. (the “Company,” “we,” “us,” or “our”) within the meaning of the federal securities laws. All statements other than statements of historical facts contained in this presentation, including, among others, statements regarding the Company’s strategy, expectations, cash runway and future financial condition, future operations, and prospects, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “aim,” “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “design,” “due,” “estimate,” “expect,” “goal,” “intend,” “may,” “objective,” “plan,” “positioned,” “potential,” “predict,” “seek,” “should,” “target,” “will,” “would” and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. The Company has based these forward-looking statements largely on its current expectations, estimates, forecasts and projections about future events and financial trends that it believes may affect its financial condition, results of operations, business strategy and financial needs. In light of the significant uncertainties in these forward-looking statements, you should not rely upon forward-looking statements as predictions of future events. These statements are subject to risks and uncertainties that could cause the actual results to vary materially, including, among others, the risks inherent in drug development such as those associated with the initiation, cost, timing, progress and results of the Company’s current and future research and development programs, preclinical and clinical trials.

For a detailed discussion of the risk factors that could affect the Company’s actual results, please refer to the risk factors identified in the Company’s SEC reports, including its Quarterly Report on Form 10-Q dated May 10, 2022. Except as required by law, the Company undertakes no obligation to update publicly any forward-looking statements for any reason.

Sana Biotechnology

Engineered Cells as Medicines

Ability to modify the genome and use engineered cells as medicines has the potential to be one of the most important advances in healthcare over the next several decades:

- Nearly every disease is caused by damage to or dysfunction of a cell
- Sana's ambition is to repair or replace any cell in the body

Platform progress, broad capabilities, and strong balance sheet enable us to execute on a broad vision:

- Goal: allo T and *in vivo* CAR T INDs this year with ~2 INDs per year going forward
- Building expertise in key areas: delivery of genetic material, gene modification, immunology, biology, and manufacturing
- \$657M cash and investments as of March 31, 2022; expect cash runway into 2025 enabling multiple data readouts across our platforms based on current timelines for lead programs
 - Slowed pace of investment for some programs with INDs expected in 2024+

Sana goal: Repair cells in the body when possible or replace them when needed

in vivo Cell Engineering

Repair and control the genes of any cell in the body

Deliver any payload...

(DNA, RNA, protein, organelle, integrating vs non-integrating)

To any cell...

(unlimited volume of distribution)

In a specific...

(e.g., just T cell)

And repeatable way

(limit immunogenicity)

ex vivo Cell Engineering

Replace any cell in the body

Manufacture any cell at scale...

That engrafts...

(the right cell in the right environment)

Functions...

(understand exact phenotype desired)

And persists

(overcome immune rejection and cellular signaling, such as apoptotic signaling)

Sana's platforms, technology, and programs

| PLATFORM | TECHNOLOGY | PROGRAMS (CELL TYPES) | THERAPEUTIC AREA | PRE-CLINICAL PRODUCT CANDIDATE | POTENTIAL INDICATIONS |
|------------------------------|----------------------------------------------|------------------------|-----------------------------------------|--------------------------------|-----------------------|
| ex vivo cell engineering | Hypoimmune donor-derived | T cells | Oncology | SC291 [CD19] | NHL/ALL/CLL |
| | | | | SC276 [CD22 (+CD19)] | NHL/ALL/CLL |
| | | | | SC255 [BCMA] | Multiple myeloma |
| | Hypoimmune stem cell-derived | Beta cells | Diabetes | SC451 | Type 1 diabetes |
| | Stem cell-derived (to migrate to hypoimmune) | Glial progenitor cells | Central nervous system (CNS) | SC379 | Huntington's disease |
| Pelizaeus-Merzbacher disease | | | | | |
| in vivo cell engineering | Fusogen | T cells | Oncology | SG295 [CD8/CD19] | NHL/ALL/CLL |
| | | | | SG239 [CD8/BCMA] | Multiple myeloma |
| | | | | SG242 [CD4/CD19] | NHL/ALL/CLL |
| | | | | SG221 [CD4/BCMA] | Multiple myeloma |
| | | | | SG233 [CD8/CD22 (+CD19)] | NHL/ALL/CLL |
| Hepatocytes | Liver-related genetic disorders | SG328 | OTC ¹ | | |
| Hematopoietic stem cells | Hemoglobinopathies | SG418 | Sickle cell disease Beta-thalassemia | | |

¹Omithine transcarbamylase deficiency

Hypoimmune technology: Protecting cells from immune rejection

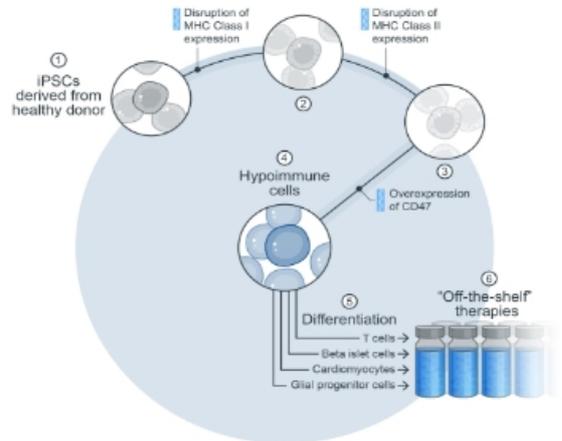
Sana approach: Leverage insights from nature to create hypoimmune cells (HIP)

“Allogeneic” fetus:

- Half of fetal proteins are from the father, not the mother.
- However, the fetus is not rejected by the mother.



How can we protect our engineered cells from getting attacked from the recipient's immune system?



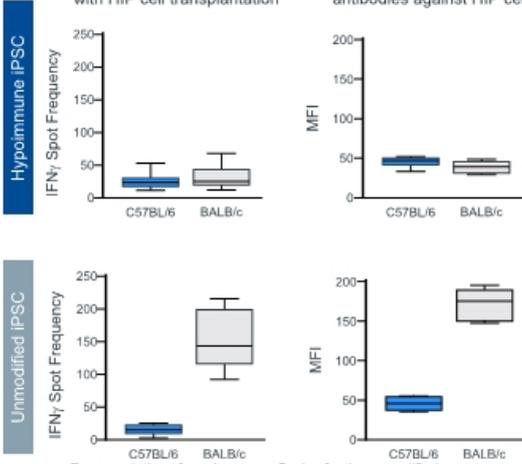
Hypoimmune cells evade rejection from the adaptive and innate immune system in mice

Evade the adaptive immune system

T cell Activation (ELISPOT)

No systemic T cell activation with HIP cell transplantation

No binding of donor-specific antibodies against HIP cells

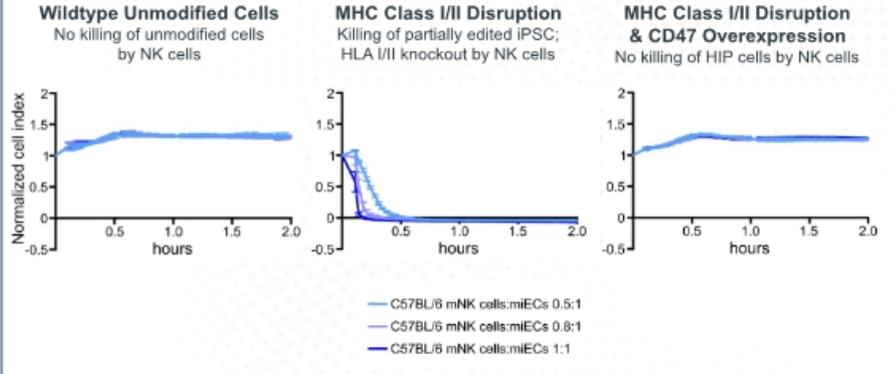


Representative of results across 5 mice for the unmodified arm and across 6 mice for the hypoimmune arm.

Evade the innate immune system

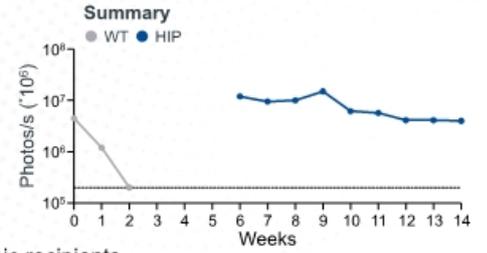
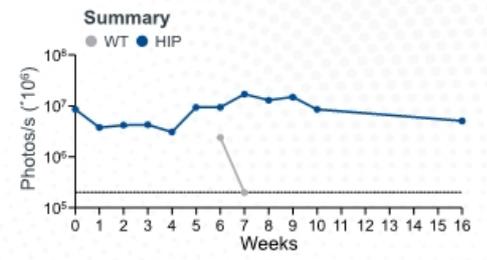
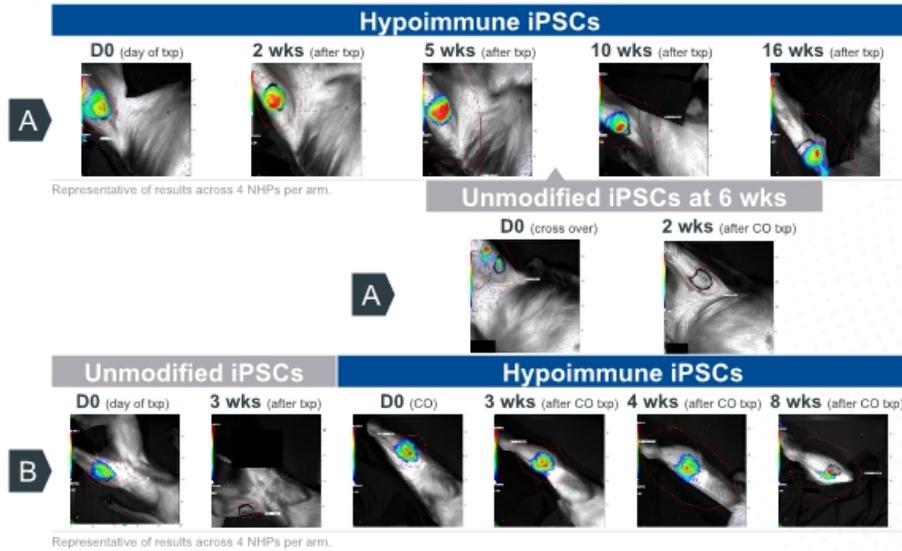
NK Cell Killing

No NK cell killing of HIP cells



Deuse T, ..., Schrepfer S. *Nat Biotechnology*. 2019; 37:252-258

Hypoimmune cells survive *in vivo* in NHP while unmodified iPSCs get rejected

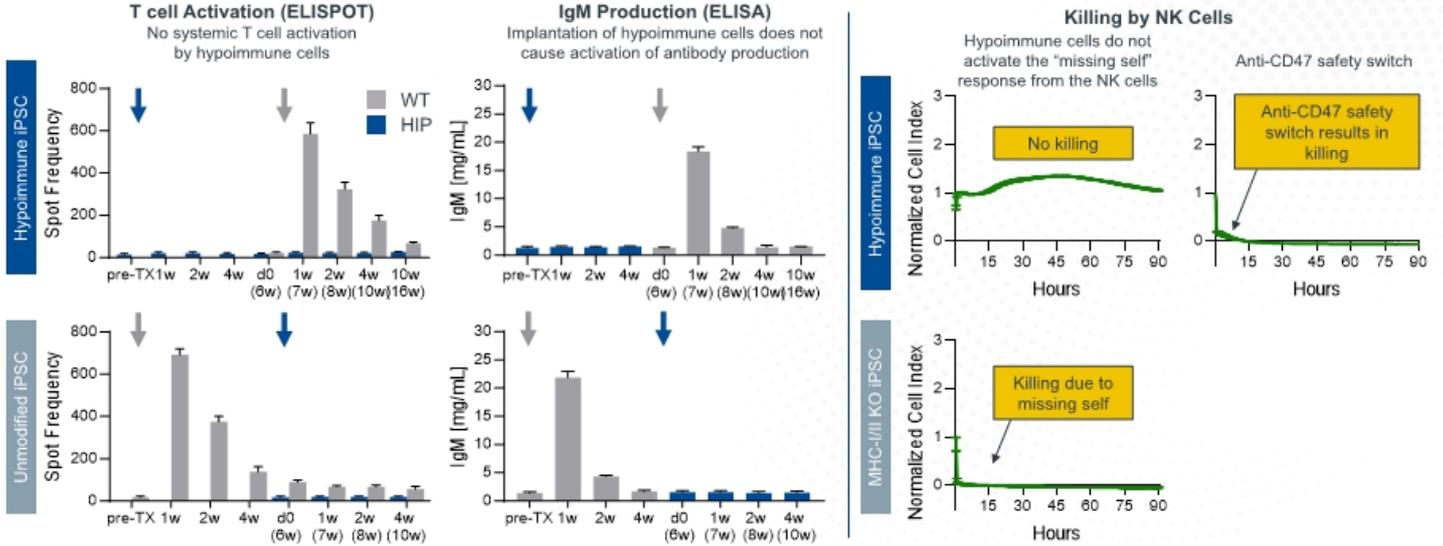


• NHP unmodified iPSCs (wt) & NHP hypoimmune iPSCs (HIP) were transplanted into 8 allogeneic recipients

CO, cross over; Txp, transplant

Hypoimmune cells evade rejection from the adaptive and innate immune system in NHPs

Transplantation of NHP iPSCs into allogeneic NHPs: immune evasion is achieved even after prior sensitization



Representative of results across 4 NHPs per arm.

Sana is pursuing a broad *ex vivo* cell engineering strategy

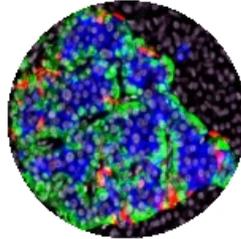
Transforming *ex vivo* cell engineering through development of hypimmune cell platform

Differentiate pluripotent stem cells with hypimmune edits

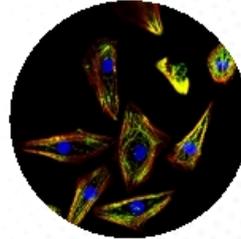
Programs that benefit from, but do not require hypimmune edits



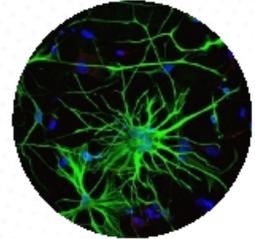
T cells



Pancreatic islets



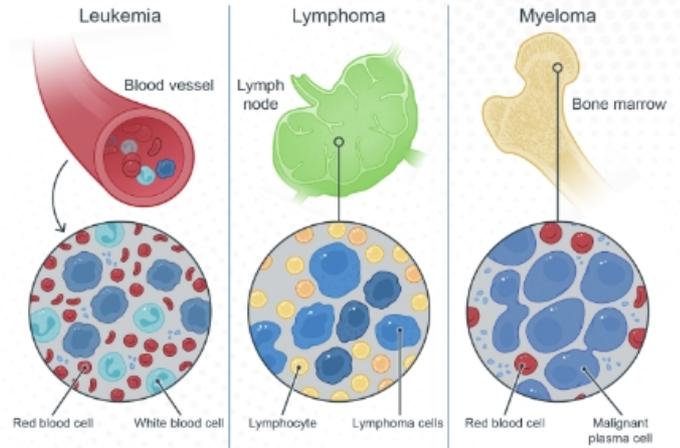
Cardiomyocytes



Glial progenitor cells

High unmet need remains for blood cancers

- Significant unmet need in B cell malignancies and multiple myeloma in the US and EU alone:
 - ~250,000 new cases annually¹
 - Est. 100,000 deaths annually¹
- <10,000 patients have been treated with CAR T therapy to date²
- Of those treated, many do not respond and many relapse
- Manufacturing and access challenges remain for many patients



¹World Health Organization, GLOBOCAN 2020
²Financial Reports, through Q3 2021; Evaluate Pharma, through Q3 2021

Sana's hypoimmune allo T is potentially best-in-class

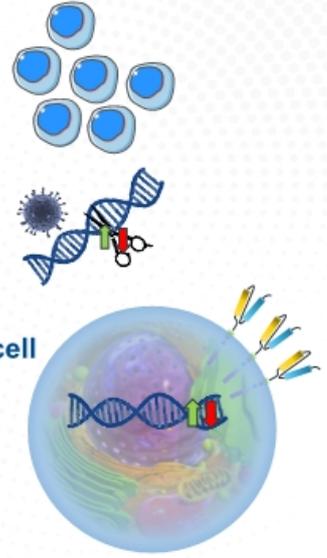
| Immune Challenges | Current Allo T | Sana Hypo Allo T |
|------------------------------|----------------|------------------|
| GvHD | ✓ | ✓ |
| HvGD: Adaptive immune system | ? | ✓ |
| HvGD: Innate immune system | ✗ | ✓ |

GvHD, graft versus host disease; HvGD, host versus graft disease.

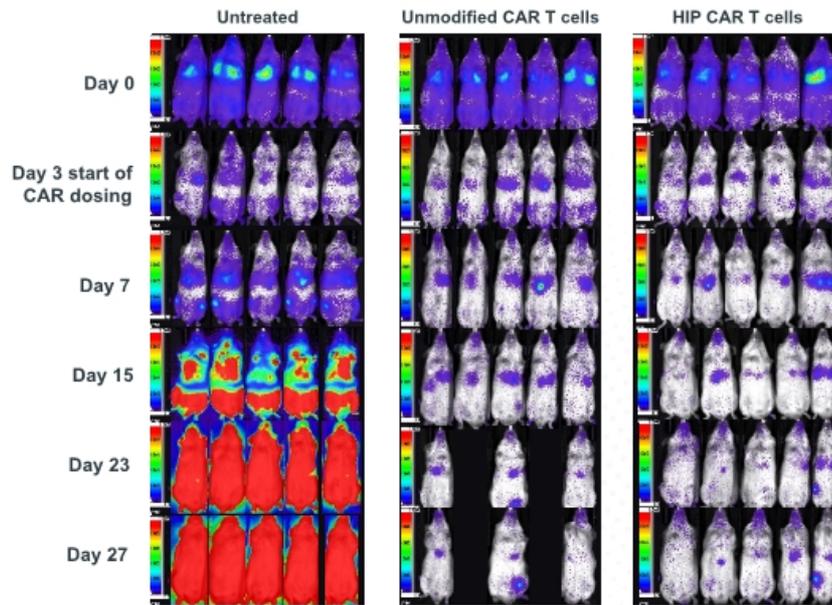
1 Donor or iPSC T cells

2 Cell engineering

3 CD19 targeted HIP allogeneic T cell



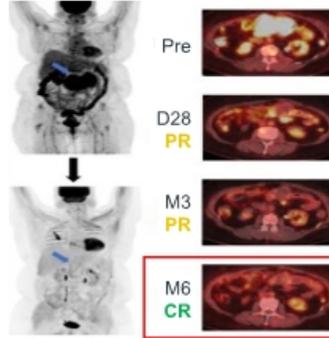
CD19 HIP CAR T cells clear tumor *in vivo*



Clinical study shows CD22 CAR T efficacy in treating relapsed lymphoma after prior CD19 CAR T therapy

| | Patient 1 |
|-----------------------------|-----------|
| Prior lines of therapy | 5 |
| Prior CAR T therapy | Yes |
| Product previously received | Yescarta |
| Antigen targeted | CD19 |

Blood 2021 Apr 29;137(17):2321-2325. doi: 10.1182/blood.2020009432.



Minimal ICANS / CRS observed across dose levels

| Parameter | DLBCL DL1 (N=15) | DLBCL DL2 (N=9) | Total (N=24) |
|-----------------------------------|------------------|-----------------|--------------|
| Cytokine release syndrome*, n (%) | | | |
| None | 1 (7%) | 0 (0%) | 1 (4%) |
| Grade 1 | 6 (40%) | 1 (11%) | 7 (29%) |
| Grade 2 | 8 (53%) | 7 (78%) | 13 (54%) |
| Grade 3 | 0 (0%) | 1 (11%) | 1 (4%) |
| Neurologic events / ICANS*, n (%) | | | |
| Grade 1 | 1 (7%) | 1 (11%) | 2 (8%) |
| Grade 2 | 1 (7%) | 1 (11%) | 2 (8%) |

| LBCL | Total (N=24) |
|----------------------------------|----------------|
| Median follow up, months [range] | 8.6 [1.6-21.3] |
| Overall Response Rate*, n (%) | 19 (79%) |
| CR Rate | 14 (58%) |

Miklos et al, ASH 2021
Total is a combination of DL1 and DL2

Miklos et al, ASH 2021

Best-in-class, broadly accessible allogeneic CAR T cells

- Expect to file our first allo T IND targeting CD19 as early as this year
- CD19/CD22 dual targeting offers potential of higher and more durable complete response rates
- Fully-human, clinically validated CD22 CAR with potential to address CD19 CAR T failures
- Fully-human, clinically validated BCMA CAR to potentially treat multiple myeloma
- Targets beyond CD19, CD22, and BCMA

Type 1 diabetes represents a large unmet need with a loss of ~15 years of life¹

Large unmet need remains

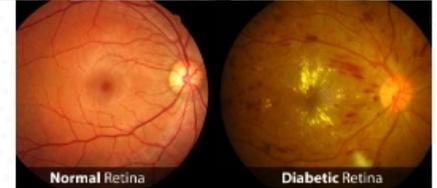
- Disease where destruction of insulin-producing beta cells in the pancreas results in inability to control blood glucose
- 1.6M patients with type 1 diabetes in the US and 2.4M in Europe²; 51k new patients/year combined³
- Long-term complications: end-organ damage, including heart attack, stroke, retinopathy, and nephropathy

➔ **Our goal is to produce hypoimmune beta cells that evade the immune system and normalize glucose**

¹Rawshani et al, Lancet 2018

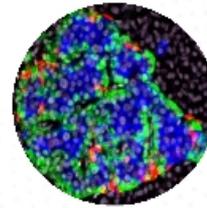
²Centers for Disease Control and Prevention, Diabetes Report, 2017-2018

³National Institutes of Health, Health Promot Perspect 2020



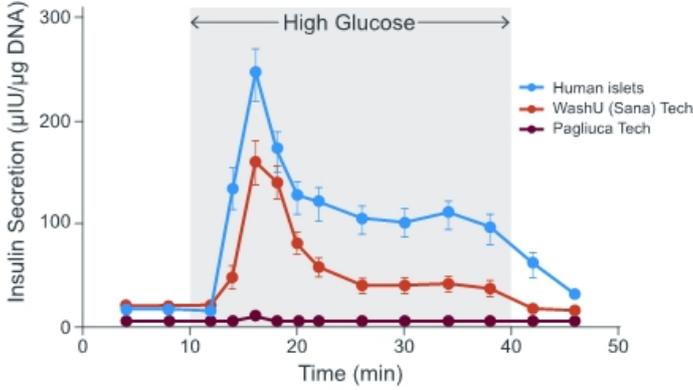
Progress toward turning beta cells into medicines

1. **Make** functional beta cells from iPSCs cells ✓
2. **Hide** beta cells from allogeneic rejection ✓
3. **Hide** beta cells from autoimmune reaction ✓
4. **Create** GMP supply chain

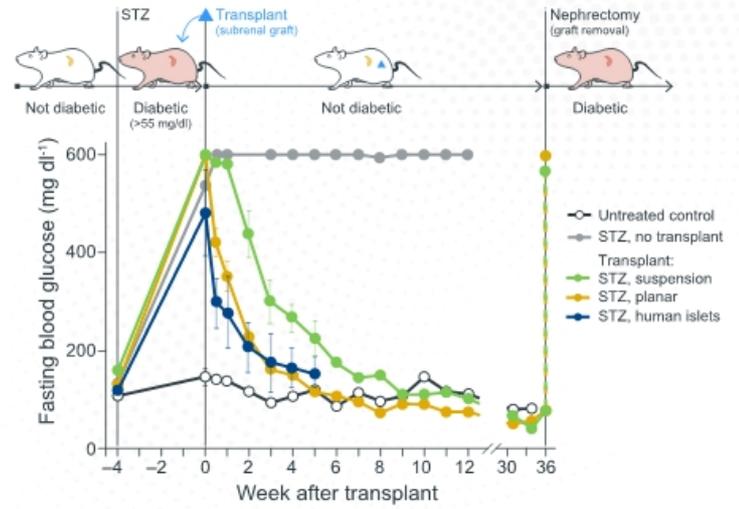


Stem cell-derived pancreatic islet cells lead to robust function

Superior insulin secretion and faster kinetics *in vitro*

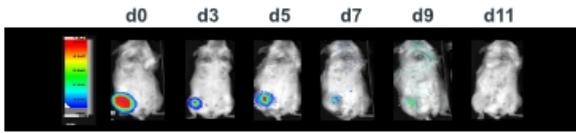


Robust rescue of type 1 diabetes mouse model

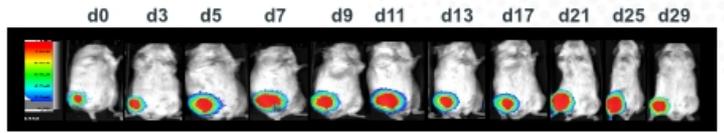


Hypoimmune pancreatic islet cells evade immune detection and regulate glucose levels

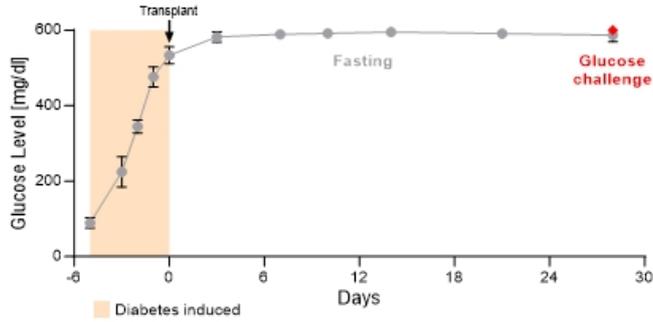
Allogeneic human unmodified islet cells



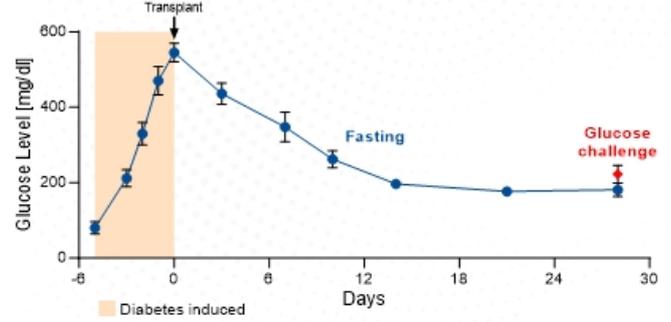
Allogeneic human hypoimmune islet cells



Glucose levels stay elevated

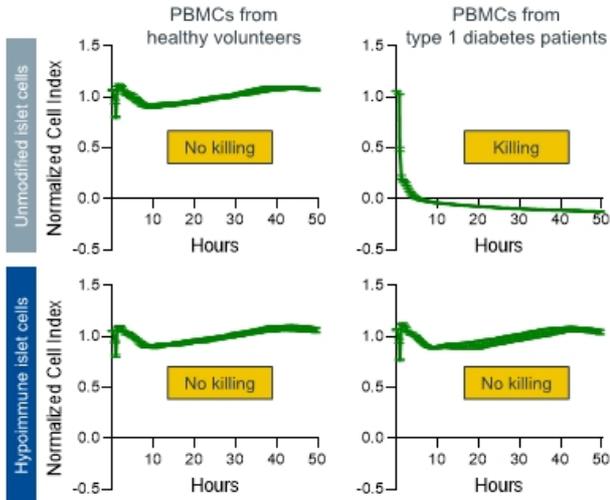


Glucose levels normalized

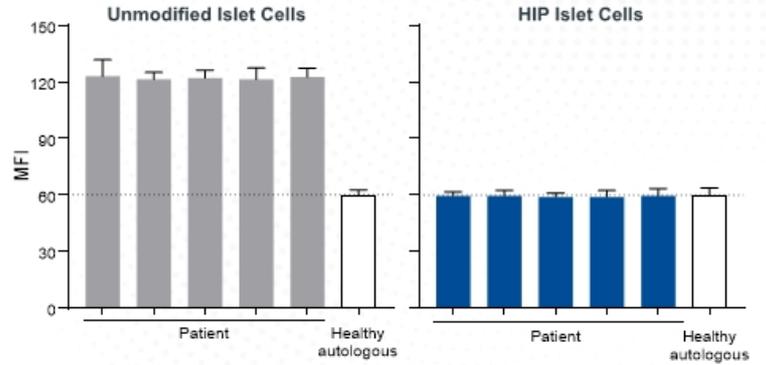


Hypoimmune pancreatic islet cells evade autoimmune killing in testing of blood from type 1 diabetes patients

T cells from PBMCs of type 1 diabetes patients kill unmodified islets, but not HIP islet cells



Antibodies from sera of type 1 diabetes patients bind to unmodified islets, but not HIP islet cells
Serum from healthy volunteers or type 1 diabetes patients



Robust GMP supply chain required to use iPSC-based therapies as medicines

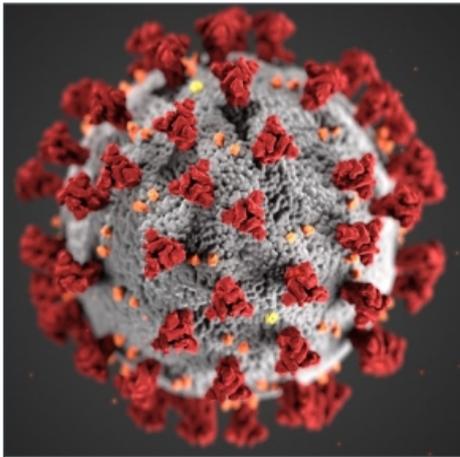
- 1 GMP genomically stable cell lines** FCDI licenses and bespoke lines

- 2 GMP gene editing reagents** Beam license enables editing requirements for current programs

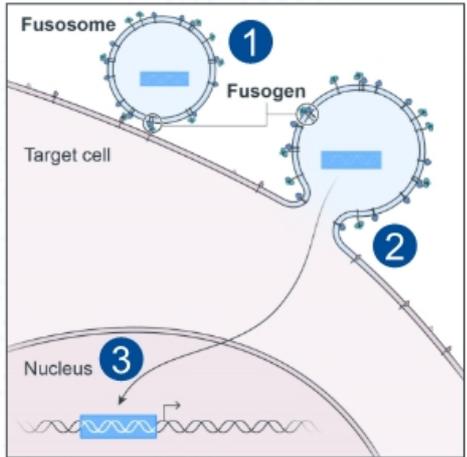
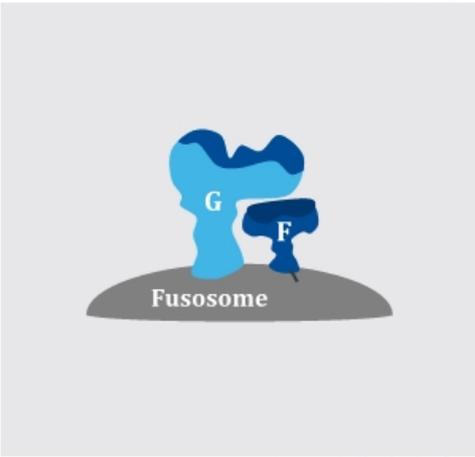
- 3 GMP gene-edited master cell bank** Creating internal master cell banks for GMP HIP-edited iPSCs

Fusosome technology: Development of cell-specific *in vivo* delivery platform

Sana approach: Leverage insights from nature to deliver various payloads to specific cells

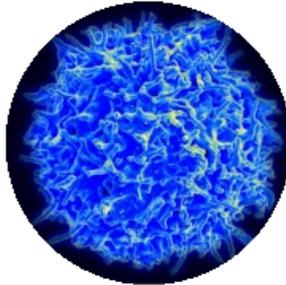


Source: CDC website

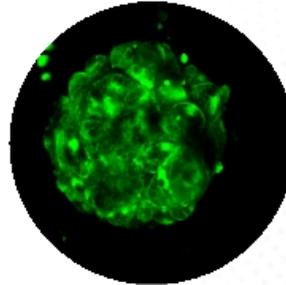


In vivo cell engineering: Creating targeted medicines across a diverse set of cell types

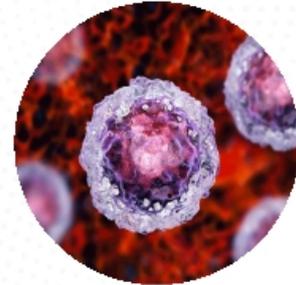
in vivo cell engineering strategy focused on developing therapies with transformative **fusogen platform delivery based on cell specificity and payload diversity**



T cells



Hepatocytes

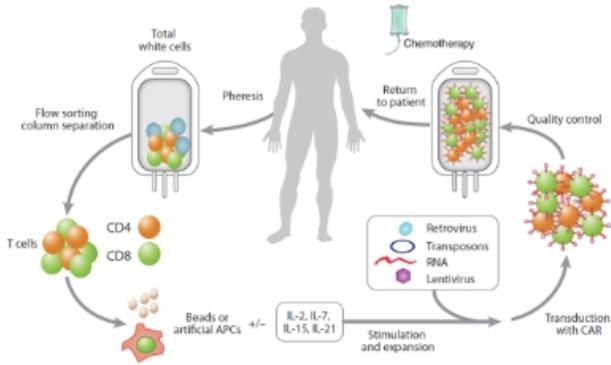


Hematopoietic stem cells

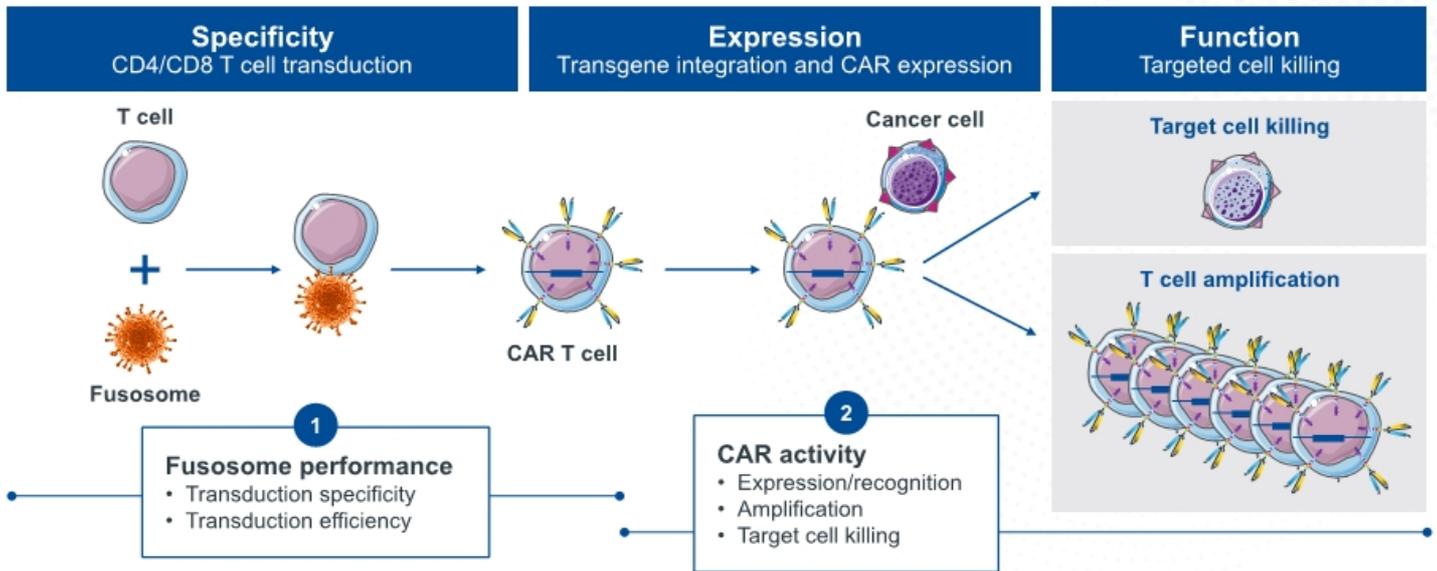
High unmet need remains for blood cancers

Current *ex vivo* approaches have limitations

Fusogen platform offers potential to overcome these limitations

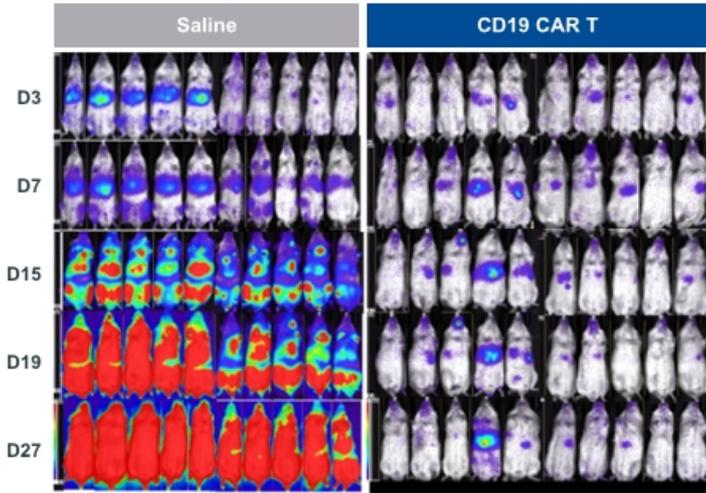


T cell fusosome carrying CAR construct infused into patient

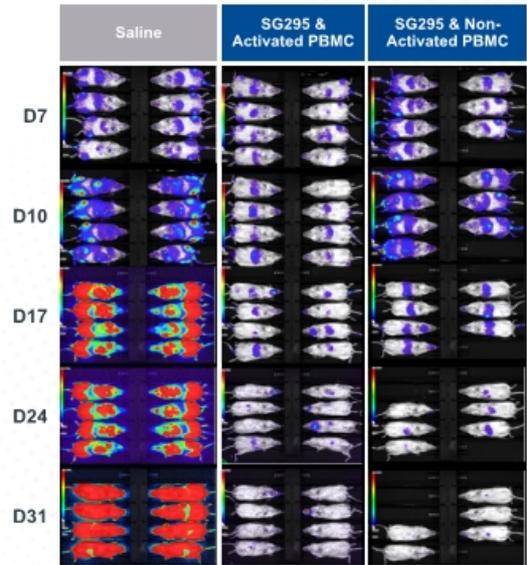


IV administration of CD19 CAR delivered by fusosome can clear B cell tumors in humanized mice comparably to *ex vivo* CD19 CAR T

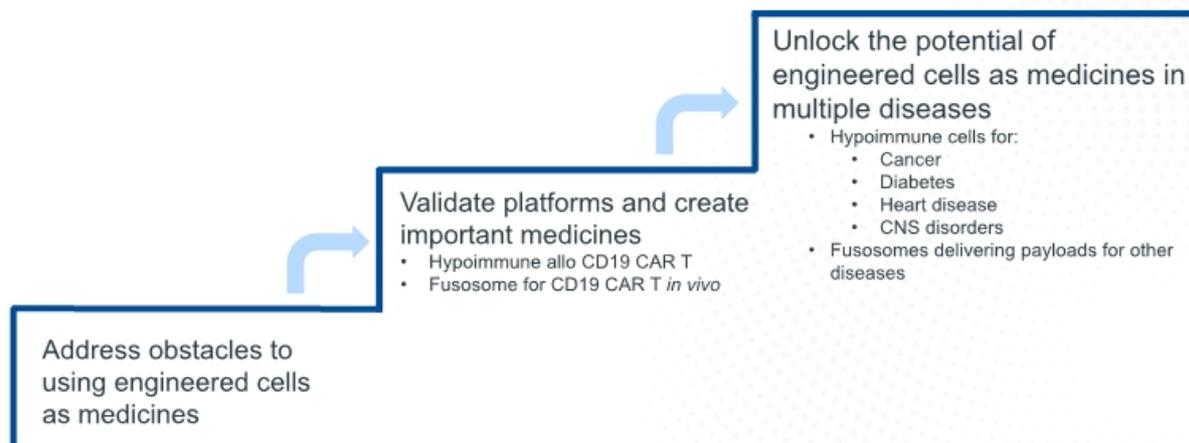
CD19 CAR T: *ex vivo*



CD19 CAR delivered by fusosome: *in vivo*



Sana aspiration: Engineered cells as medicines



Thank You

Sana Biotechnology
www.sana.com



Appendix

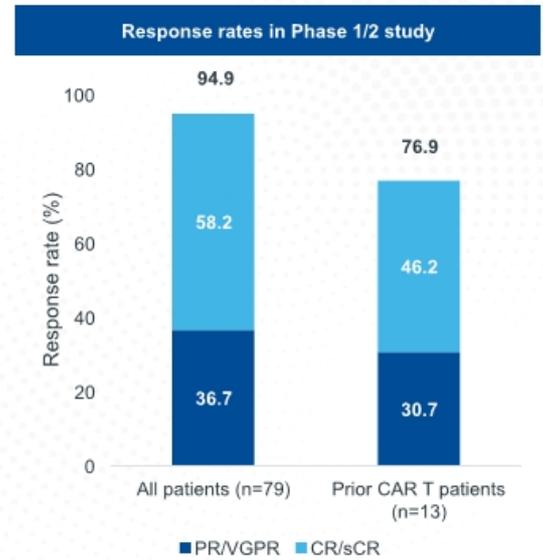


BIOTECHNOLOGY



BCMA CAR T (CT103A) initial clinical data promising in relapsed/refractory multiple myeloma

- **Safety profile (All patients n=79):**
 - Grade 3+ CRS: 2.5% i.e., 2 patients
 - Grade 3+ ICANS: 0%
- **Efficacy profile (All patients n=79):**
 - ORR: 94.9%
 - CR/sCR: 58.2%
 - MRD negativity at least once after infusion: 93.7%
 - In prior BCMA CAR T treated patients (n=13): ORR (76.9%); CR/sCR (46.2%)
- **Persistence of CT103A transgene:**
 - At 12 months after infusion (n=18): 55.6%
 - Maximum persistence: 34 months after infusion in first patient [patient remained in sCR]
- **Immunogenicity (anti-drug antibody positivity):**
 - Within 3 months of infusion: 1.3% i.e., 1 patient
 - Within 7 month median follow-up: 12.7% i.e., 10 patients



Note: Treated with recommended Phase 2 dose of 1e6 CAR T cells/kg

Li et al. ASH 2021 (Abstract #547)
IASO Bio Press Release, December 13, 2021.

