

**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): January 13, 2025

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 Stock Market LLC

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 43rd Annual J.P. Morgan Healthcare Conference on January 13, 2025. 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 (the “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

<u>Exhibit Number</u>	<u>Description</u>
99.1	Corporate Presentation dated January 13, 2025
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.

Sana Biotechnology, Inc.

Date: January 13, 2025

By: _____ /s/ Bernard J. Cassidy
Bernard J. Cassidy
Executive Vice President and General Counsel

Corporate Presentation
January 2025



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 studies, 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 November 8, 2024. Except as required by law, the Company undertakes no obligation to update publicly any forward-looking statements for any reason.



Sana Biotechnology

Changing the Possible for Patients

Recent data confirm Sana's hypoimmune platform (HIP) overcomes allogeneic rejection in people

- Transplanted HIP-modified pancreatic islets overcome allogeneic and autoimmune rejection in type 1 diabetes
- We believe T1D result generalizable across many cell types and patient populations

HIP technology provides foundation for multiple drugs across multiple large therapeutic areas

- Type 1 diabetes – SC451
- B-cell mediated autoimmune diseases (lupus, vasculitis, others) – SC291
- Blood cancers – SC262

Fusogen platform proof of concept for *in vivo* CAR T cells

- Potential for potent CAR T cells with no conditioning chemotherapy and opportunity to transform the autoimmune landscape

Balance sheet allows potential for multiple data readouts

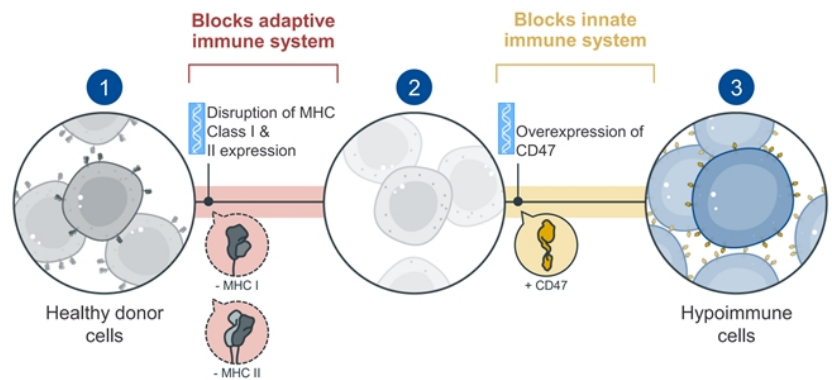


Overcoming allogeneic immune rejection has been key limitation in transplant and cellular medicine

Allogeneic cell rejection

- ~75 years of transplants – immune rejection remains the largest problem
- Lifelong immunosuppression is current standard
- Genome modification efforts to date have generally been incomplete
- Autologous therapies have limited scalability and are only available for a small number of cell types
- Sana has published and/or presented positive data with the HIP platform showing the ability to overcome allogeneic rejection from many cell types and multiple species

Sana's hypoimmune approach



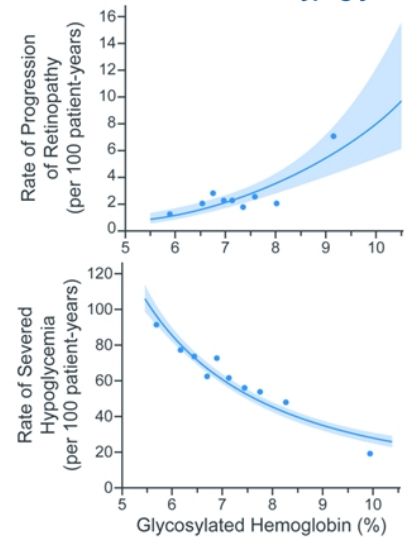
Current clinical platform with multiple ongoing approaches in research phase.



Type 1 diabetes (T1D) remains a significant unmet need

- T1D is an autoimmune destruction of insulin-producing pancreatic beta cells and leads to lifelong insulin therapy requirement
- 8.4M people WW have T1D, and incidence is increasing. Prevalence is expected to double over next 15 years
- 80% of individuals with T1D are from high-income countries
- Insulin therapy has been transformative, but not curative
- T1D leads to more than a decade shorter life expectancy despite significant advances such as continuous glucose monitoring, insulin pumps, and novel forms of insulin
- Complications directly related to hyperglycemia include microvascular (retinopathy, nephropathy, neuropathy) and macrovascular (coronary artery disease, heart attacks, stroke, wound healing, and amputations) issues
- At the other extreme, severe hypoglycemia can be rapidly fatal

Improvement in glycemic control reduces microvascular complications but increases the risk of hypoglycemia¹

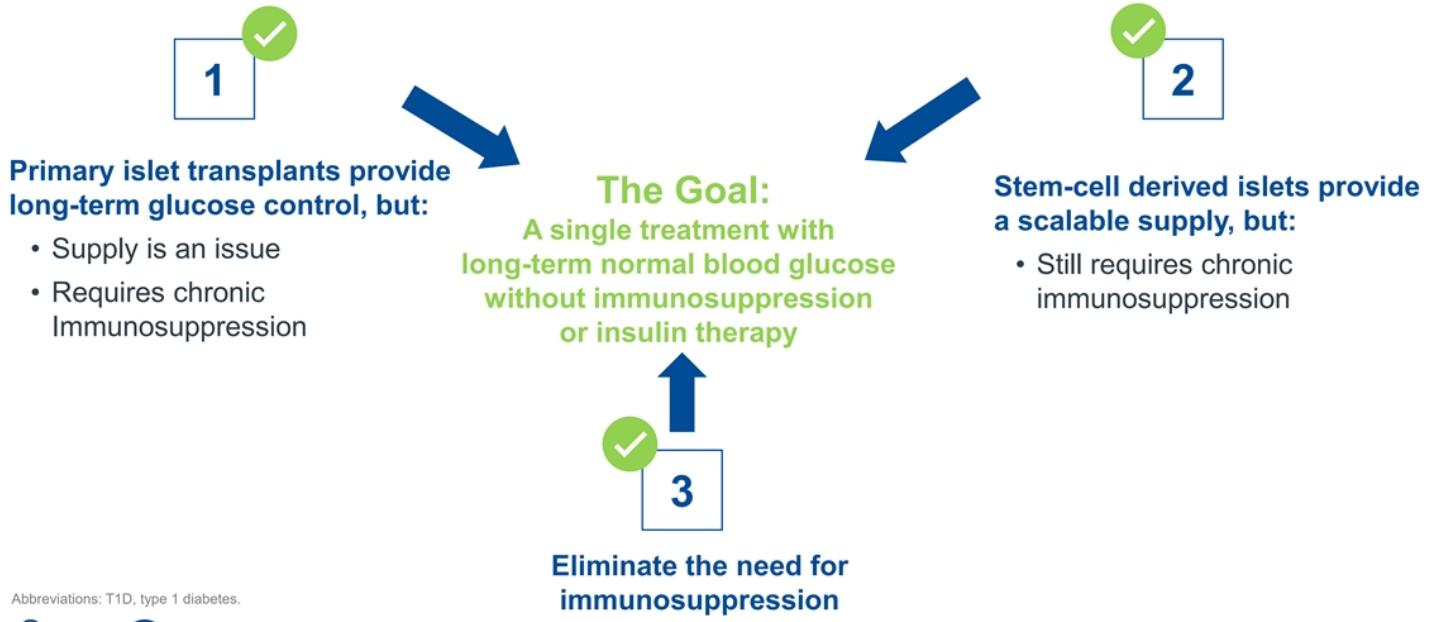


¹Diabetes Control and Complications Trial Research Group et. Al. N Engl J Med 1993; 329:977-986

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Advancing toward a cure for broad T1D population

T1D is a disease of missing pancreatic beta cells



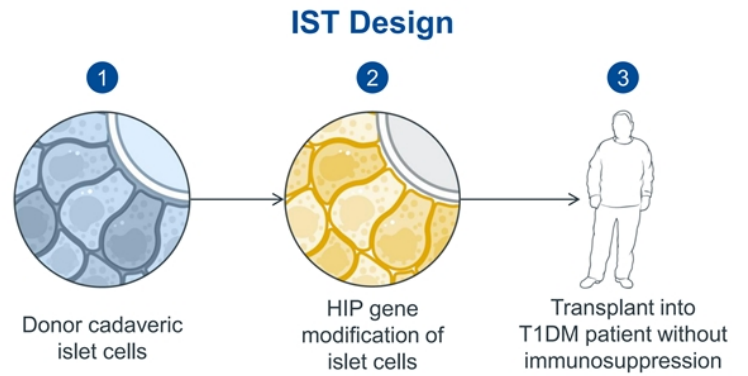
Abbreviations: T1D, type 1 diabetes.



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Potential clinical validation of hypoimmune islet cells in T1DM patients

- Trial at Uppsala University Hospital
- Primary human HIP-modified islet cells transplanted in type 1 diabetes patients
- Intramuscular administration in forearm
- No immunosuppression
- Insights for SC451



Key Measured Outcomes

Safety
Immune evasion
Cell survival
C-peptide

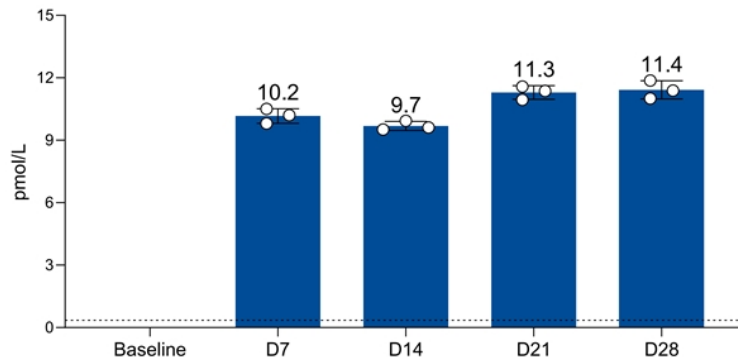
All primary and secondary endpoints met

Primary and Secondary Endpoints: Data Summary

Endpoints	D7	D14	D21	D28
Safety (no AE/SAE related to drug)	✓	✓	✓	✓
Cell survival/function (C-peptide)	✓	✓	✓	✓
Graft visibility (MRI)	✓	✓	Not performed (as per protocol)	✓
Adaptive immune evasion	✓	✓	✓	✓
Innate immune evasion	✓	✓	✓	✓

Stable C-peptide demonstrates survival and function of cells after HIP islet cell transplantation

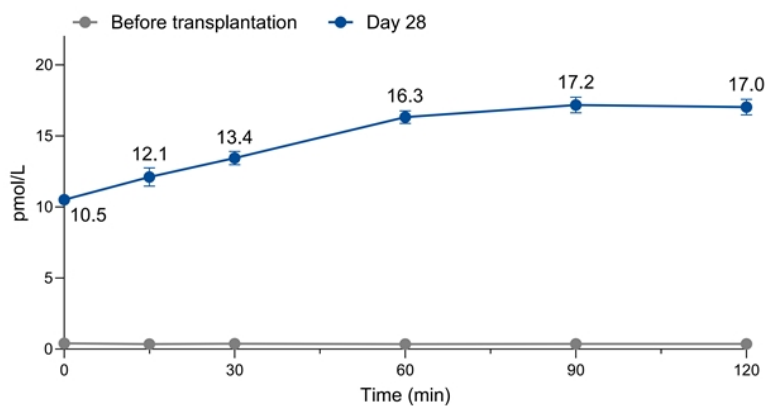
Basal C-peptide in peripheral blood



Summary: No detectable C-peptide before transplantation; present and stable C-peptide observed after transplantation.

Baseline: Below limit of detection (LOD). Sensitivity: 0.48 pmol/L. Dots represent technical triplicates. C-peptide analyzed in serum.

Increased C-peptide levels with a mixed meal tolerance test (MMTT) highlight survival and function

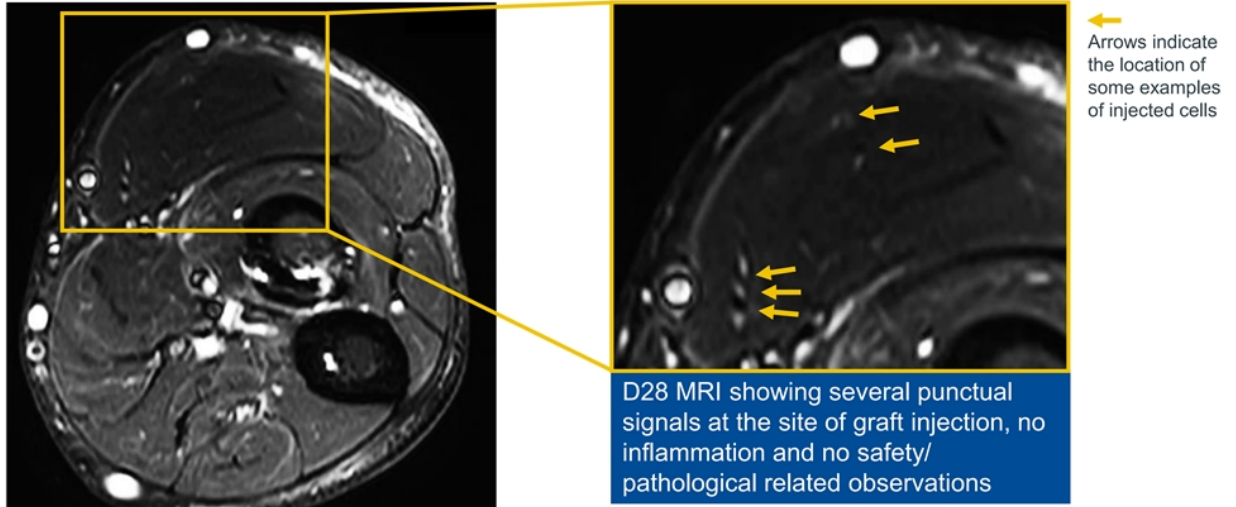


Summary: Before transplantation, C-peptide is below detection limit during MMTT. 28 days after UP421 transplantation, C-peptide is present and stimulated by MMTT.

Baseline: Below limit of detection (LOD). Sensitivity: 0.48 pmol/L.
Standard deviation represent technical triplicates. C-peptide analyzed in plasma samples.

Day 28 MRI: Further evidence of graft survival

MR T2-STIR-weighted trans images showing signal in musculus brachioradialis after injection of UP421

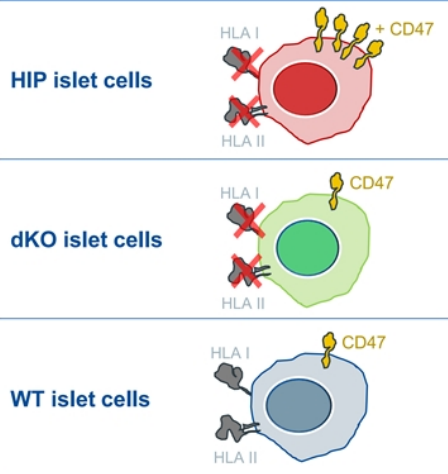


The MR T2-STIR-weighted sequence is sensitive to water and fluid and is a fat suppression technique to suppress the high signal from fat.
Abbreviations: STIR, short TI inversion recovery.

The drug product's mixed cell population allows detailed immune analysis

Donor islet cells contain wild type & double knockout cells as well as HIP cells

Donor



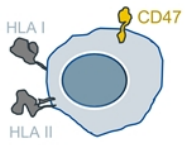
Immune analysis using patient's (recipient) immune cells after transplantation

- T cells
- Donor-specific antibodies
- Natural killer cells
- Whole blood

Abbreviations: dKO, double knock-out; HIP, hypimmune; WT, wild type.

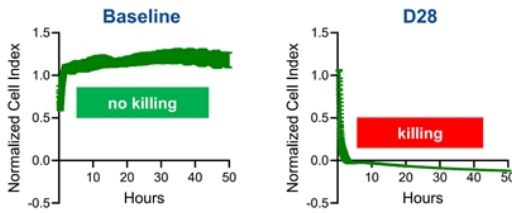
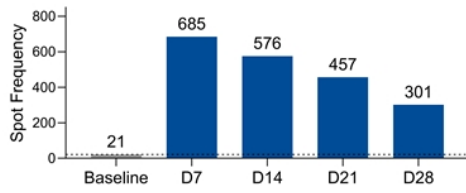
Unmodified islet cells: Do **not** evade T cell or B cell immune response

WT islet cells



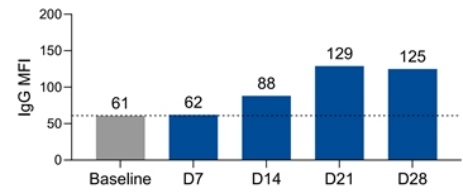
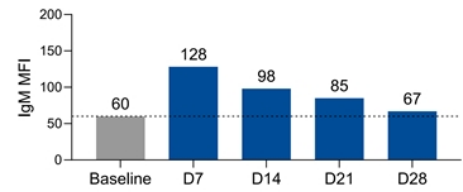
WT islet cells

Patient's T cells are activated and kill WT islet cells with peak at 7 days after transplant



WT islet cells

Patient's B cells produce donor-specific antibodies (switch from IgM to IgG at D14)



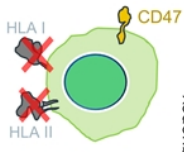
Abbreviations: D, day; WT, wild type.



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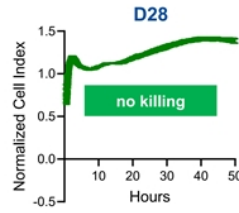
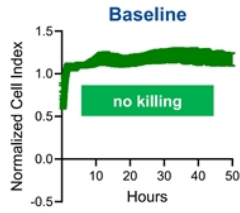
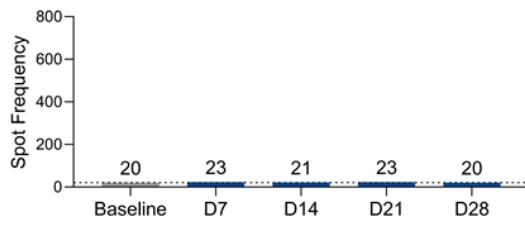
dKO islet cells: Evade B and T cell responses but are killed by NK cells

dKO islet cells



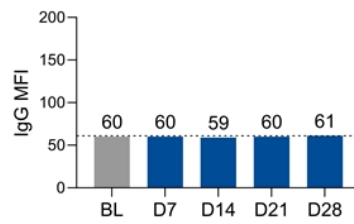
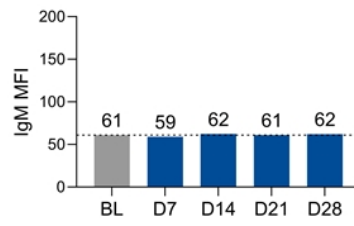
dKO islet cells

No killing of HLA deficient cells by patient's T cells



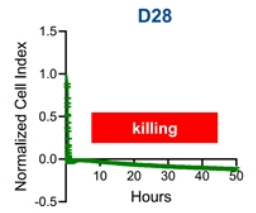
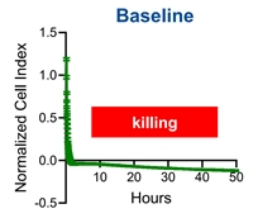
dKO islet cells

No binding of donor-specific antibodies to HLA deficient cells



dKO islet cells

Patient's NK cells are killing HLA I/II deficient cells (due to "missing-self")



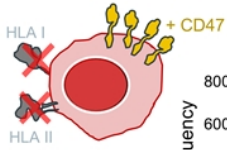
Abbreviations: BL, baseline.



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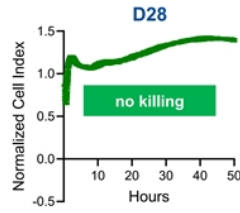
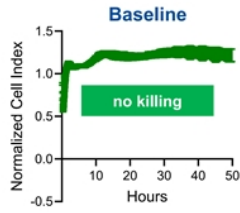
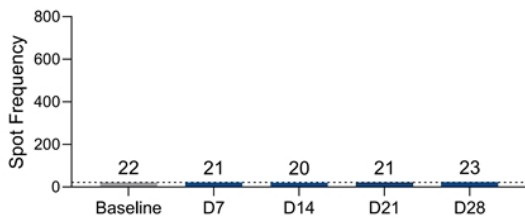
HIP islet cells: Evade T cell, B cell, and NK cell immune responses

HIP islet cells



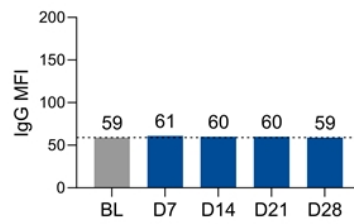
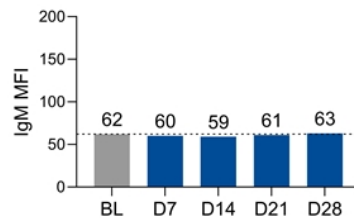
HIP islet cells

No killing of HIP islet cells by patient's T cells



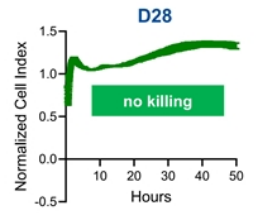
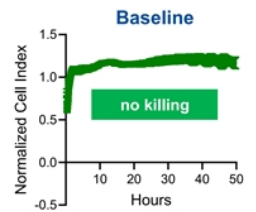
HIP islet cells

No binding of donor-specific antibodies to HIP islet cells



HIP islet cells


No killing of HIP islet cells by patient's NK cells

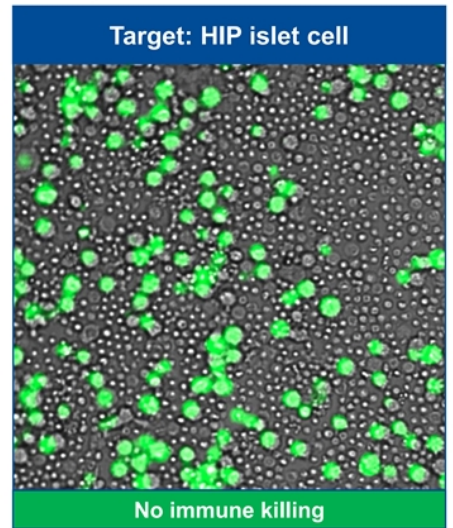
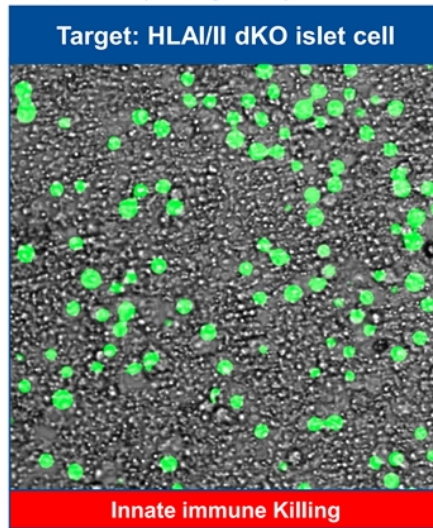
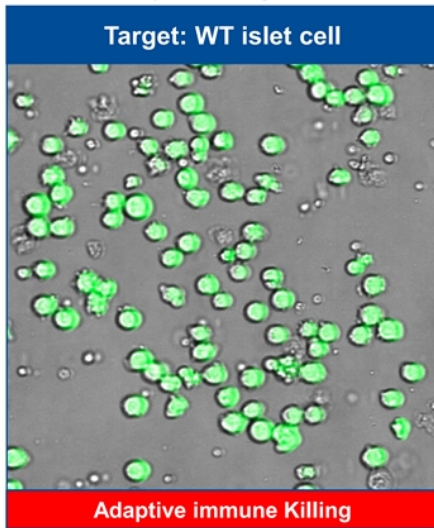


HIP islet cells overcome patient's allogeneic and autoimmune barrier

still image before movie

D7 sample: PBMC (containing all immune cell populations) plus serum (containing antibodies and complement) killing assay

Donor islet cells with editing profile in column title  NK cells




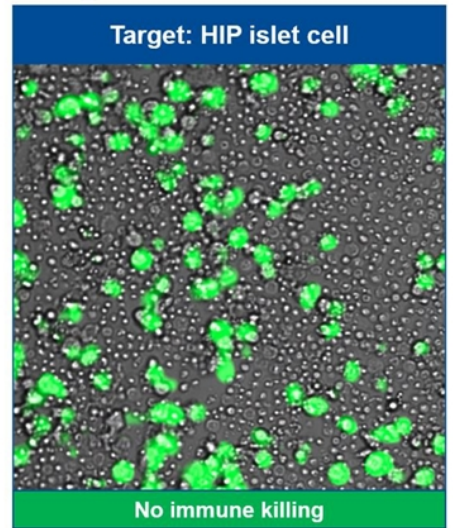
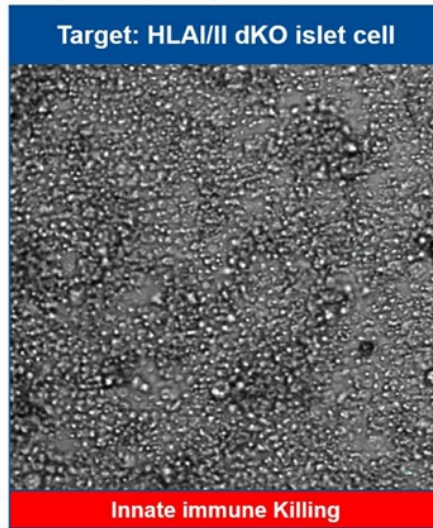
Actual assay time = 4 hours.

HIP islet cells overcome patient's allogeneic and autoimmune barrier

still image after movie

D7 sample: PBMC (containing all immune cell populations) plus serum (containing antibodies and complement) killing assay

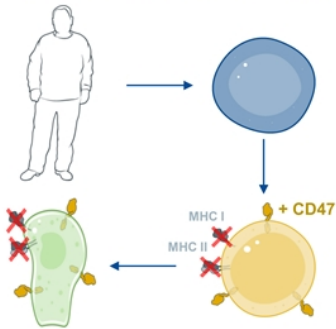
Donor islet cells with editing profile in column title  NK cells



Actual assay time = 4 hours.

SC451: A drug for the broad T1D population

1 Make hypoimmune islet cells from stem cells



2 Manufacture at scale



3 Deliver as a single therapy



SC451 program – HIP stem cell-derived islet cell therapy delivered with no immunosuppression

Four major challenges to realizing the vision of SC451

1

Overcoming immune rejection without immunosuppression

We believe this challenge has now been solved

2

Differentiating PSCs into islet cells at a purity, potency, and yield to enable clinical trial dosing

Many groups have done this successfully and so has Sana

3

Generating a gene-modified MCB from a GMP-compliant PSC line that is genetically stable and remains so after gene editing and differentiation into islet cells

We have done it in research

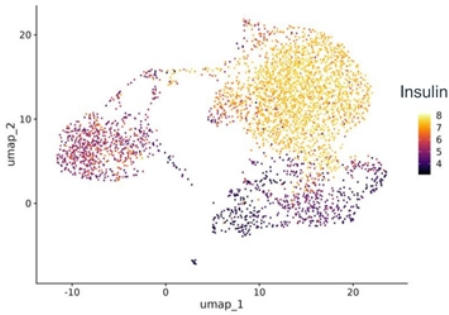
4

Manufacturing enough product to treat the patients that need it

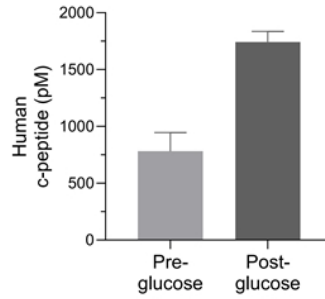
We are working on the challenges of manufacturing at scale

HIP-modified PSC differentiated islet cells transplanted into muscle persist & control blood glucose in mice for >15 months

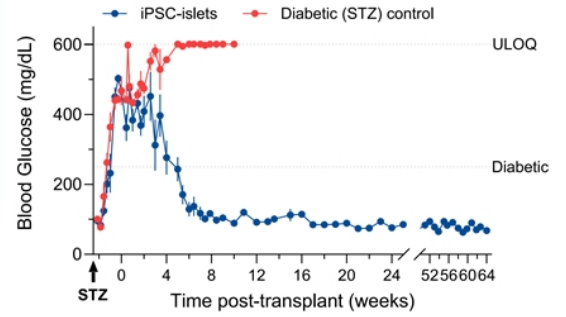
PSCs differentiated into islets at high purity



HIP-modified PSC islets produce human c-peptide *in vivo***
(performed at week 51)



HIP-modified PSC islets persist and control blood glucose
(non-fasted blood glucose*)



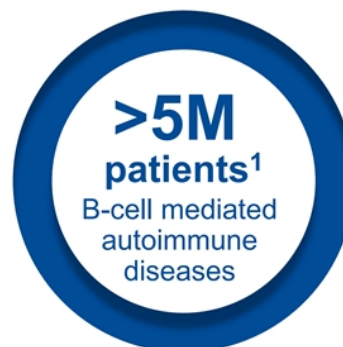
- Maintain normoglycemia (64+ weeks)
- Secrete c-peptide in response to glucose
- Retain strong expression of hCD47

Diabetic threshold at 250 mg/dL; data reported as mean \pm S.E.M. **plasma human c-peptide after 5 hr fast (pre) and 30 min after I.P. 3 g/kg dextrose bolus (post); data is mean \pm S.D.

B-cells drive autoimmune disease in millions of patients

>75 different types of autoimmune disorders with underlying B cell pathology and high unmet need

- SLE
- Vasculitis (granulomatosis with polyangiitis & microscopic polyangiitis)
- Neuromyelitis optical spectrum
- Pemphigus
- Relapsing and progressive MS
- Rheumatoid arthritis
- Lupus nephritis
- Sjögren's syndrome
- NMDAR encephalitis
- Thrombocytopenic purpura
- Amyloidosis
- Systemic sclerosis
- Autoimmune hemolytic anemia
- Chronic immune demyelinating polyradiculoneuropathy
- Immune-mediated necrotizing myopathy
- Membranous nephropathy

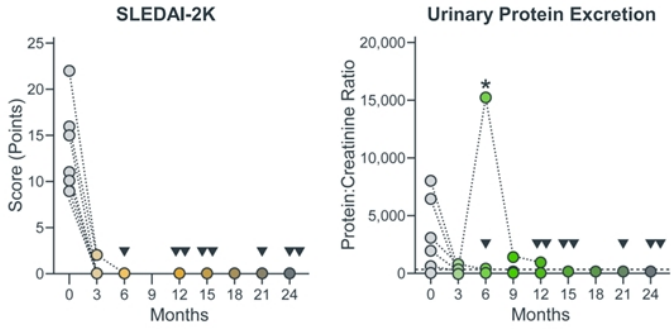


Lupus Foundation of America estimates over a million people have lupus in the US²

¹Sana internal analysis; SciVida Autoimmune Factbook 2023, U.S.; ²www.lupus.org/resources/how-many-people-have-lupus-in-the-united-states.

Autologous CAR Ts have shown curative potential; allogeneic cells have inherent advantages

CD19 Autologous CAR T treatment has delivered long term, drug-free remissions¹



Autologous CAR T Challenges

- Difficult to scale
- Prescription-to-infusion time over 4 weeks
- Patients must be taken off anti-inflammatory drugs for apheresis and treatment

Allogeneic CAR T Promise

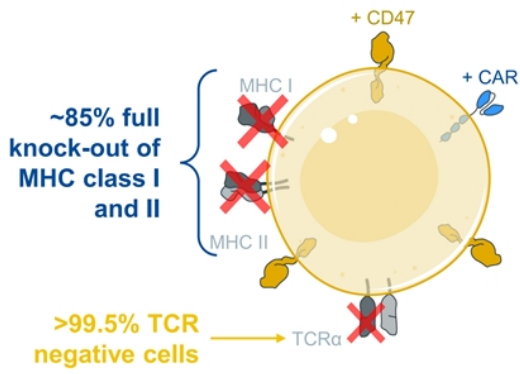
- Scalable
- Available to patients "off-the-shelf"
- No apheresis

¹Muller F et al, NEJM 2024, Erlangen case series.

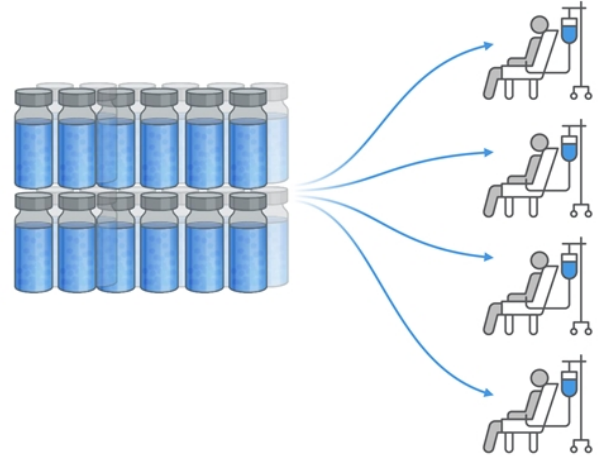
Allogeneic CAR Ts are the future

Sana's T cell manufacturing process provides high yields of successfully edited cells

SC291: Highly efficient editing of cells



Product ready when the patient needs it 100s of autoimmune patient batches/manufacturing run¹



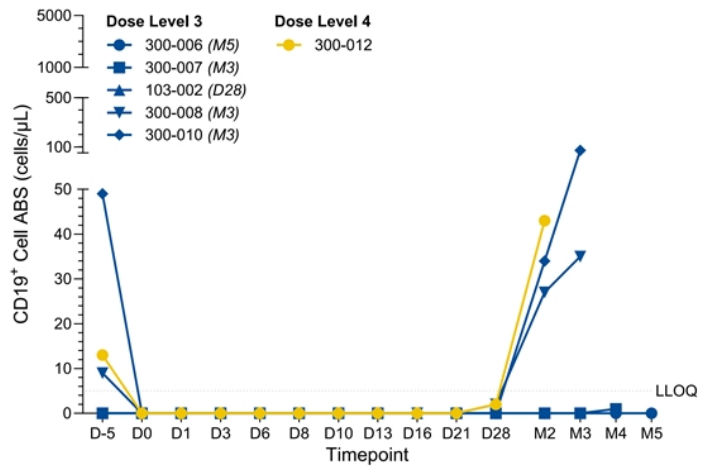
¹100s of doses assumes an autoimmune dose consistent with public data on current autoimmune dose levels.

SC291 can be safely administered and results in deep, dose-dependent B-cell depletion in oncology

ARDENT Safety Data (N=16)

- No cases of Grade 2 or higher CRS
 - 3 cases of Grade 1 CRS
- No cases of ICANS
- 1 case of Grade 1 IEC-HS

Deep B-cell depletion seen in NHL patients



Data cutoff Nov 2024.

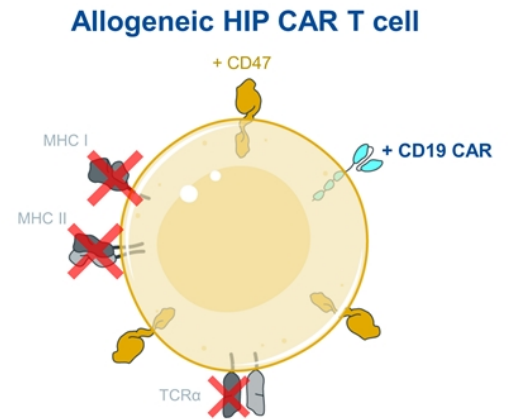
Abbreviations: CRS, cytokine release syndrome; ICANS, Immune effector cell-associated neurotoxicity syndrome; IEC-HS, immune effector cell associated HLH-like syndrome.



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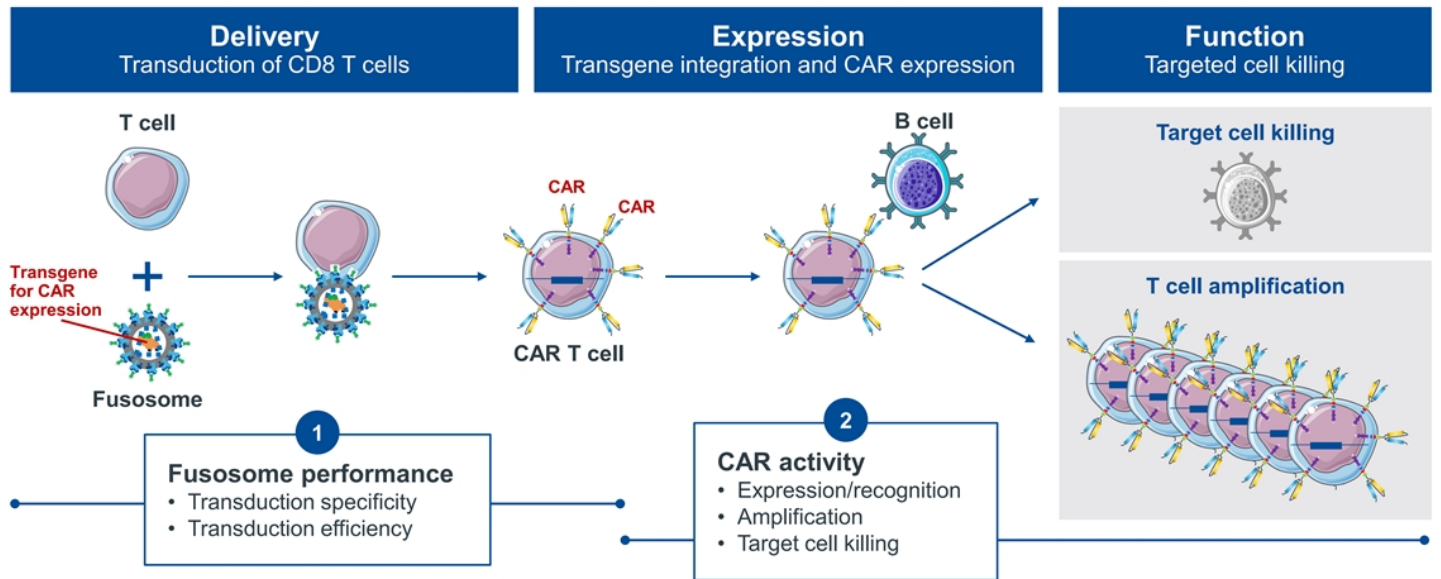
SC291: GLEAM Phase 1 trial goals are to understand safety, dose, and early efficacy

- Key features of Phase 1 trial (GLEAM)
 - Patients with refractory systemic lupus erythematosus and ANCA-associated vasculitis
 - Dose escalation study
 - Potential to expand beyond these indications over time
- SC291 granted Fast Track designation in relapsed/refractory SLE
- Trial enrolled first patients in 2024

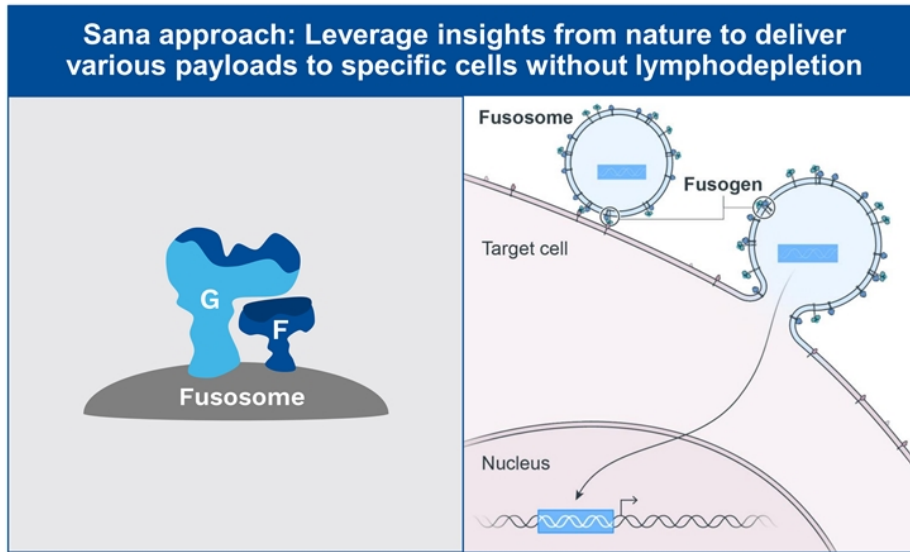


An effective allogeneic CAR T offers potential to transform outcomes for patients

Sana is pursuing *in vivo* engineering of CAR T cells using a fusosome vector system



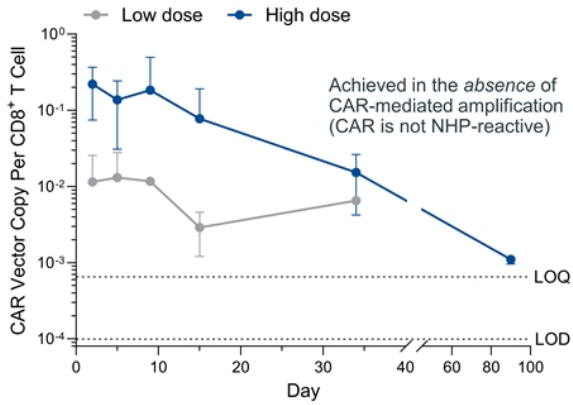
Fusosome technology: Cell-specific *in vivo* delivery



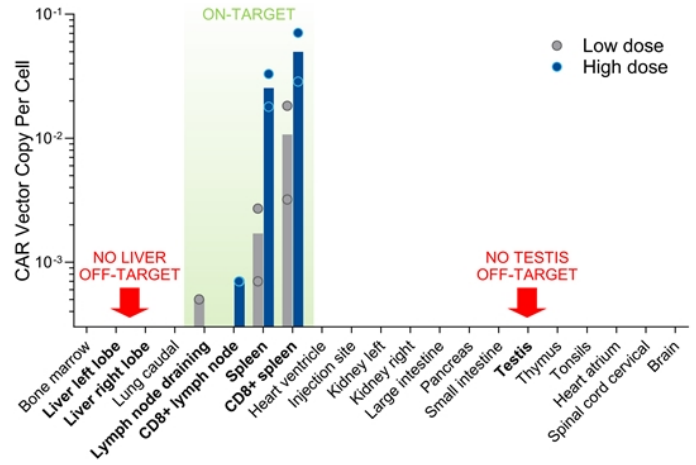
Potent and cell-specific *in vivo* delivery demonstrated with SG299 in GLP tox study

4 NHPs at each dose received single SG299 injection

Potent transduction of circulating CD8⁺ T cells



No off-target transduction detected in hepatocytes or gonadal cells



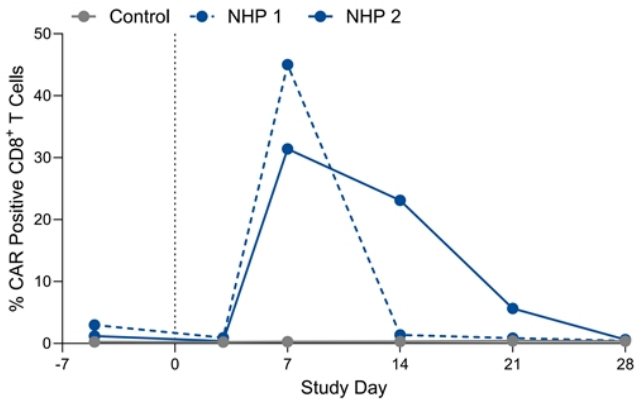
Avg ± SEM plotted. Note that any values BLOQ are not plotted. 2 vehicle-control monkeys were BLOQ. Abbreviations: BLOQ, below level of quantification; LOD, level of detection; LOQ, level of quantification.



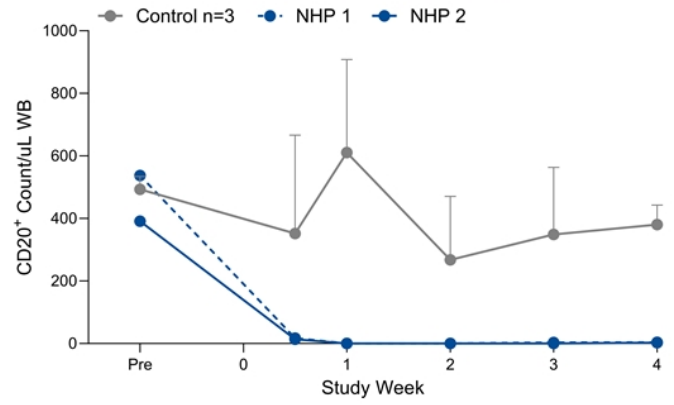
Surrogate SG299 with additional component leads to T cell transduction, CAR expansion, and B-cell depletion

Surrogate SG299 transduces T cells & expresses a CAR that recognizes NHP B cells

CD8⁺ CAR⁺ cells expand in circulation

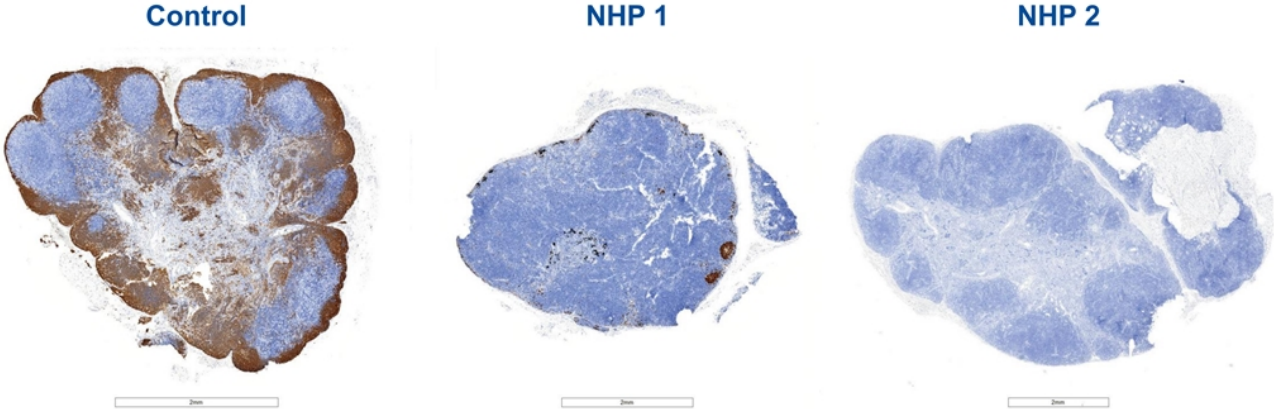


Deep B-cell depletion achieved in peripheral blood



Study shows B cell clearance in lymph nodes without lymphodepletion

Anti CD20 staining of day 28 lymph node biopsy



Brown indicates CD20 IHC staining; black reflects tattoo ink.



SC262: Targets growing population of patients with inadequate response to CD19 therapy

CD19 CAR T relapsed patients represent large and growing unmet need¹

Estimated ~12,000 B cell malignancy patients treated with CD19 CAR T in 2027²



- Potential of ~7,500 CAR T failures annually in 2027²
- Median survival of ~5 months post-CD19 CAR T therapy failure³

Estimated ~35-40% of CAR T patients with durable complete responses⁴

 = 1,000 people

CD22 CAR T is a promising approach to treat CD19 therapy failure⁵

- Autologous CD22 CAR T results in >50% CR rate in CD19 CAR failure DLBCL patients
- High rates of non relapse mortality reported in long term follow up of autologous CD22 CAR T-treated patients
- High rate of CRs also seen in CD19 failure ALL patients⁶

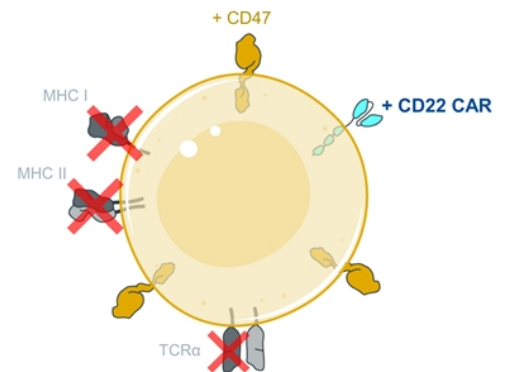
¹US, EU5, and Japan. ²Clarivate DRG NHL Market Forecast Nov 2021; 2027 Forecast is 2L+ LBCL patients; internal analysis of secondary EPI data.

³Di Blasi et al. *Blood*. 2022; DESCAR-T registry. ⁴Di Blasi et al. *Blood*. 2022; ⁵2024 ASH Kramer et al. ⁶2022 ASH Miklos/Stanford; ⁶2018 *Nature Med* Fry, et al.

SC262: VIVID Phase 1 trial goals are to understand safety, dose, and early efficacy

- Key features of Phase 1 trial (VIVID)
 - CD19 CAR T exposed patients with relapsed and/or refractory NHL
 - Starting dose of 90 million CAR T cells
- Expect to generate and share data
 - Safety and tolerability
 - Early response rates

Allogeneic HIP CAR T cell



An effective allogeneic CAR T offers potential to transform outcomes for patients

We anticipate meaningful clinical data in multiple diseases in 2025 and beyond

- **HIP platform** shows ability to overcome allogeneic and autoimmune rejection **in people** across multiple cell types
- **Type 1 diabetes** – all components for a curative therapy are now in place:
 - Patients have remained off insulin for over a decade after islet transplant (but with immunosuppression to date)
 - Stem cell-derived islets offer a more scalable solution (but with immunosuppression to date)
 - Have now shown that we can eliminate immunosuppression with HIP modifications
- **SC451**, a HIP-modified stem cell-derived pancreatic islet therapy, contains all components and is advancing toward the clinic
- **SC291** leads to deep B-cell depletion and has significant potential in B-cell mediated autoimmune diseases. Ongoing GLEAM study
- **Fusogen platform** offers the potential to treat B-cell mediated autoimmune diseases and B-cell cancers with NO lymphodepletion
- **SC262**, a HIP-modified CD22 CAR T, has meaningful potential in treating CD19 CAR T relapsed patients. Ongoing VIVID study

Sana pipeline positioned to deliver meaningful clinical data

PRODUCT CANDIDATE	MECHANISM	INDICATIONS	PRECLINICAL IND-ENABLING	PHASE 1	PHASE 2/3	SANA'S RIGHTS
Type 1 Diabetes						
UP421	HIP primary islet cells ¹	T1D				WW
SC451	Stem-cell derived pancreatic islet cells	T1D				WW
B-cell Mediated Autoimmune Diseases						
SC291	CD19-directed allo CAR T	SLE	GLEAM			WW
SC291	CD19-directed allo CAR T	AAV	GLEAM			WW
SC291	CD19-directed allo CAR T	Other indications				WW
SG299	<i>In vivo</i> CD19-directed allo CAR T	Autoimmune disease				WW
Oncology						
SC262	CD22-directed allo CAR T	NHL (CD19 failures)	VIVID			WW
SG299	<i>In vivo</i> CD19-directed allo CAR T	Hematological malignancies				WW

¹Investigator sponsored trial. Abbreviations: AAV, ANCA-associated vasculitis; SLE, systemic lupus erythematosus; NHL, non-Hodgkin lymphoma; SLE, systemic lupus erythematosus; T1D, type 1 diabetes; WW, worldwide.



Thank You

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