



# Pioneering the Future of Genomic Medicines

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November 2022

# Forward-Looking Statements

This presentation contains forward-looking statements regarding our current expectations. These forward-looking statements include, without limitation, statements relating to the potential to develop, obtain regulatory approvals for and commercialize durable, safe and effective therapies to treat certain diseases and the timing, availability and costs of such therapies, the potential to use ZFP, ZFP-TF, CAR-Treg and other technologies to develop durable, safe and effective therapies, the potential for us to benefit and earn milestone and royalty payments from our collaborations and the timing of any such benefits and payments, our cell therapy strategy, including expansion to additional indications, plans and timing regarding the expected resumption of dosing of patients in the Phase 3 AFFINE trial and the presentation of data from such trial, our financial resources, including the sufficiency thereof, our 2022 financial guidance, anticipated plans and timelines for us and our collaborators to enroll patients in and conduct clinical trials, dose and screen patients, and present clinical data, the anticipated advancement of our product candidates to late-stage development, including potential future Phase 3 trials, execution of our corporate strategy, our pipeline and the advancement of preclinical programs to the clinic, key milestones and catalysts, and other statements that are not historical fact. These statements are not guarantees of future performance and are subject to certain risks and uncertainties that are difficult to predict. Our actual results may differ materially and adversely from those expressed. Factors that could cause actual results to differ include, without limitation, risks and uncertainties related to the effects of the evolving COVID-19 pandemic and the impacts of the pandemic and other macroeconomic factors, including as a result of the ongoing conflict between Russia and Ukraine, on the global business environment, healthcare systems and business and operations of us and our collaborators, including the initiation and operation of clinical trials; the research and development process; the uncertain timing and unpredictable results of clinical trials, including whether preliminary or initial clinical trial data will be representative of final clinical trial data and whether final clinical trial data will validate the safety, efficacy and durability of product candidates; the impacts of clinical trial delays, pauses and holds on clinical trial timelines and commercialization of product candidates, including the risk that any necessary conditions to resume dosing of patients in the Phase 3 AFFINE trial of giroctocogene fitelparvovec are not met in a timely manner, or at all, including the risk that protocol amendments for the Phase 3 AFFINE trial of giroctocogene fitelparvovec may not be accepted by the relevant review bodies in a timely manner, or at all, which could further delay or preclude further patient dosing in this trial; the unpredictable regulatory approval process for product candidates across multiple regulatory authorities; the manufacturing of products and product candidates; the commercialization of approved products; the potential for technological developments that obviate technologies used by us and our collaborators; the potential for us or our collaborators to breach or terminate collaboration agreements; the potential for us to fail to realize our expected benefits of our collaborations; and the uncertainty of our future capital requirements, financial performance and results. There can be no assurance that we and our collaborators will be able to develop commercially viable products. These risks and uncertainties are described more fully in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, as supplemented by our Quarterly Report on Form 10-Q for the quarter ended June 30, 2022. Forward-looking statements contained in this presentation speak only as of the date hereof, and we undertake no duty to update such information except as required under applicable law. This presentation concerns investigational product candidates that are under preclinical and/or clinical investigation and which have not yet been approved for marketing by any regulatory agency. They are currently limited to investigational use, and no representations are made as to their safety or efficacy for the purposes for which they are being investigated. Any discussions of safety or efficacy are only in reference to the specific results presented here and may not be indicative of an ultimate finding of safety or efficacy by regulatory agencies.

## *Non-GAAP Financial Measures*

To supplement our financial results and guidance presented in accordance with GAAP, we present non-GAAP total operating expenses, which exclude stock-based compensation expense from GAAP total operating expenses. We believe that this non-GAAP financial measure, when considered together with our financial information prepared in accordance with GAAP, can enhance investors' and analysts' ability to meaningfully compare our results from period to period and to our forward-looking guidance, and to identify operating trends in our business. We have excluded stock-based compensation expense because it is a non-cash expense that may vary significantly from period to period as a result of changes not directly or immediately related to the operational performance for the periods presented. This non-GAAP financial measure is in addition to, not a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP. We encourage investors to carefully consider our results under GAAP, as well as our supplemental non-GAAP financial information, to more fully understand our business.

## Leading Genomic Candidates into the Clinic

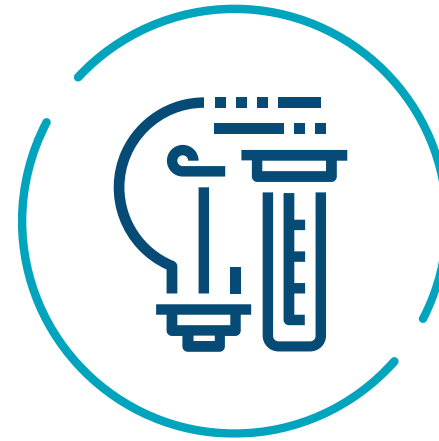
We are a genomic medicines company dedicated to translating ground-breaking science into medicines that transform the lives of patients and families afflicted with serious disease



**Pioneer in  
Genomic Medicines**



**Multiple Clinical-stage  
Programs**



**Advanced  
Scientific Toolkit**



**In-house  
Manufacturing**

# Building a Genomic Medicines Company



## Early Learnings with Breakthrough Technologies

- 1st** to edit endogenous human genes
- 1st** to treat patients with gene-edited T-cells
- 1st** to treat patients with *in vivo* genome editing
- 1st** to treat a patient with engineered CAR-Tregs

**Culture and Track Record of Innovation**



## Advancing Differentiated Genomic Medicines through the Clinic

Leverage robust toolkit and expertise to advance pipeline

Focus on Hemophilia A, Fabry Disease, and Sickle Cell Disease

**Pipeline of First-Generation Genomic Medicine Clinical Candidates**



## Pioneering the Future of Genomic Medicine

Expand utility of broad genomic engineering platform enabled by expertise in zinc fingers and CAR-Tregs

Deep pipeline of second-generation assets, focusing on autoimmune and neurology

**Preclinical Pipeline Expansion Utilizing Second-Generation Genomic Engineering Platform**

# Value Thesis

01

First-generation product candidates for Fabry Disease, Sickle Cell Disease and Hemophilia A **in or advancing into late-stage clinical development**; provide insights for second-generation programs

02

Innovative second-generation candidates applying **differentiated genomic medicine capabilities** in cell therapy and genome engineering, with a focus in autoimmunity and neurology

03

**Expansive R&D discovery engine** supported by long history of innovation

04

**Five technology-validating blue chip biopharma partners** offer domain expertise, up-front payments and a pathway to potential milestone payments

05

**In-house cGMP manufacturing facilities** provide control over quality, supply, timelines, cost and IP

06

Strong financial position to **take us through our key upcoming expected catalysts**



# Robust Pipeline with Thoughtful Balance of Partnered and Wholly Owned Programs

## Wholly Owned Programs

INDICATION	TECHNOLOGY	PRECLINICAL	PHASE 1/2	PIVOTAL
<b>Fabry Disease</b> (Israltagene civalparvec)	Gene Therapy	Clinical data presented 2H 2022. Next data update expected 1H 2023.		
<b>Sickle Cell Disease</b> (BIVV003*)	Cell Therapy	Updated clinical data expected 2H 2022		
<b>Renal Transplant</b> (TX200; Auto)	T <sub>REG</sub> Cell Therapy	First two patients dosed.		
<b>Renal Transplant</b> (Allogeneic)	T <sub>REG</sub> Cell Therapy			
<b>Inflammatory Bowel Disease</b>	T <sub>REG</sub> Cell Therapy			
<b>Multiple Sclerosis</b>	T <sub>REG</sub> Cell Therapy			
<b>Prion</b>	ZF Genome Engineering			
<b>Neurology</b> (3 Undisclosed)	ZF Genome Engineering			

## Partnered Programs

INDICATION	TECHNOLOGY	PRECLINICAL	PHASE 1/2	PIVOTAL
<b>Hemophilia A</b> (Giroctogene fitelparvec)	Gene Therapy			
<b>Oncology</b> (Kite-037)	Cell Therapy			
<b>Oncology</b> (Undisclosed)	Cell Therapy			
<b>Neurodevelopmental Disorders</b>	ZF Genome Engineering			
<b>ALS/FTD</b>	ZF Genome Engineering			
<b>Huntington's Disease</b>	ZF Genome Engineering			
<b>a-Synuclein</b> (ST-502)	ZF Genome Engineering			
<b>Tauopathies</b> (ST-501)	ZF Genome Engineering			
<b>Neurology</b> (DMI)	ZF Genome Engineering			
<b>Neurology</b> (1 Undisclosed)	ZF Genome Engineering			

 FIRST-GENERATION

 SECOND-GENERATION

# First-Generation Programs

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Compelling Proof-of-Concept  
Clinical Data



# Sangamo's First-Generation Programs

First-Gen programs capitalize on our expertise in gene therapy and cell therapy in an effort **to bring potentially transformative genomic medicines to patients with rare disease**

## Fabry Disease

(isargagene civaparvovec, or ST-920)

Phase 1/2

Updated preliminary Ph 1/2 data presented at 3 conferences including ESGCT; nine patients dosed across 4 Cohorts; five patients withdrawn from ERT; five patients dosed in expansion phase at 5e13vg/kg dose

Ph 3 planning continues



## Sickle Cell Disease

(BIVV003\*)

Phase 1/2

Dosed sixth patient in Ph 1/2 study

Presenting updated preliminary Ph 1/2 data at ASH 2022.

Ph 3 enabling activities in progress



## Hemophilia A

(giroctocogene fitelparvovec)

Phase 3

Trial sites resumed enrollment in September; dosing is expected to resume shortly; trial is over 50% enrolled.

Updated Ph 1/2 ALTA data to be presented at ASH 2022.





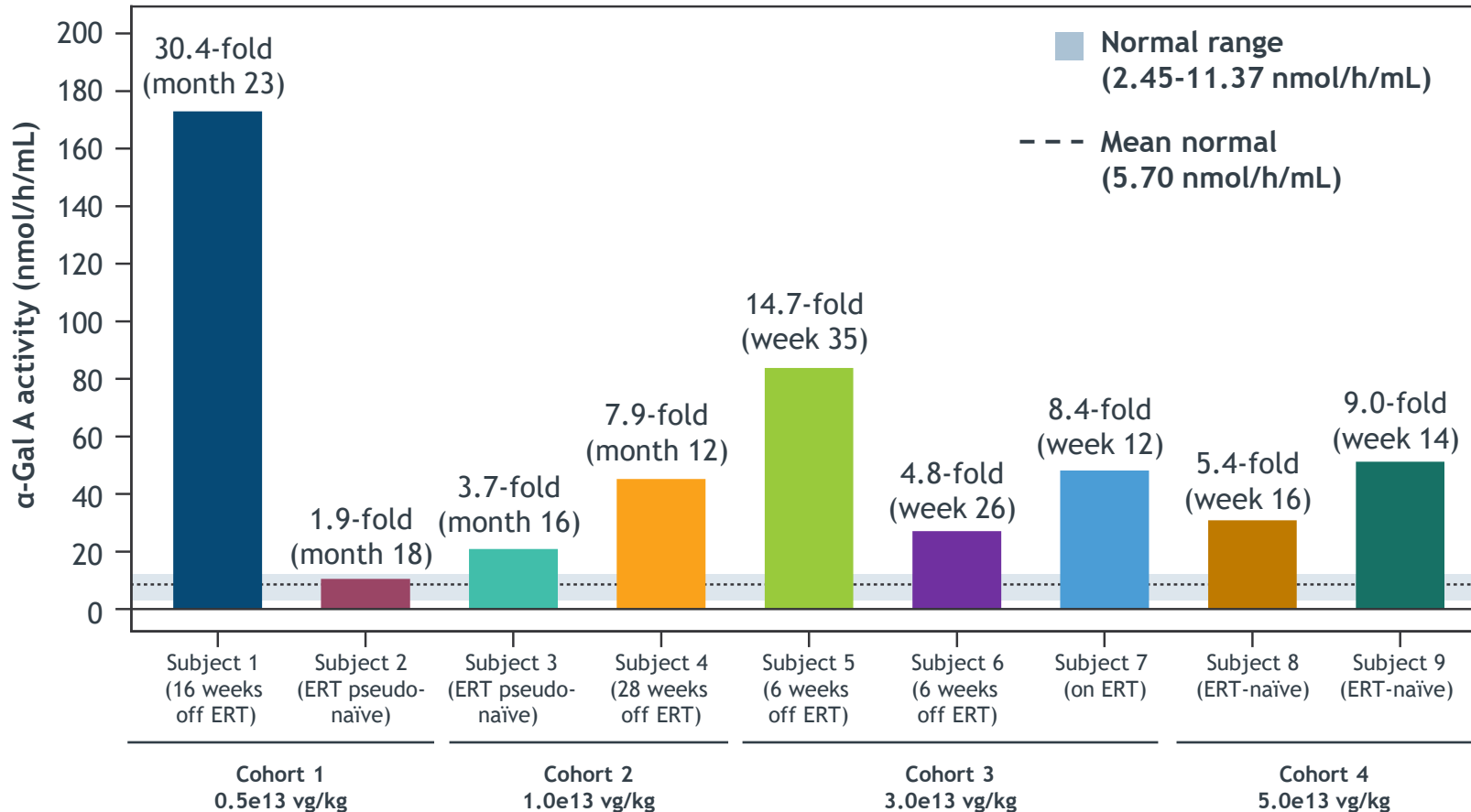


# Fabry Disease (isargalgene civaparvovec or ST-920)

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# Fabry disease: ST-920 Efficacy Data

Ph 1/2 STAAR data, ESGCT, October 12, 2022. Cut-off July 21, 2022.



Data presented as of the cutoff date of July 21, 2022. Fold change was calculated at last measured time point. α-Gal A activity was measured using a 3-hour reaction time and is presented in nmol/h/mL. For Subject 7, sampling was at ERT trough. Normal range and mean normal were determined based on healthy male individuals. α-Gal A, alpha galactosidase A; ERT, enzyme replacement therapy; LTFU, long-term follow-up

Elevated α-Gal A activity was sustained through the last sampling point for 9 subjects across all 4 dose cohorts as of July 21, 2022 data cutoff.

All four subjects (1-4) in LTFU maintained elevated α-Gal A levels for 1 year or more.

Four subjects underwent ERT withdrawal and continued to demonstrate elevated α-Gal A up to 28 weeks post ERT withdrawal.

## Since ESGCT

Fifth and final patient withdrawn from ERT in dose escalation phase.

Progressed to expansion phase, with the first five patients dosed, including two females.

Updated data expected 1H 2023.

# Fabry disease: ST-920 Safety and Tolerability

Ph 1/2 STAAR data, ESGCT, October 12, 2022. Cut-off July 21, 2022.

MedDRA Preferred Term	Cohort 1 (0.5e13 vg/kg) (n=2)		Cohort 2 (1.0e13 vg/kg) (n=2)		Cohort 3 (3.0e13 vg/kg) (n=3)		Cohort 4 (5.0e13 vg/kg) (n=2)		Overall (N=9)	
	n	Events	n	Events	n	Events	n	Events	n	Events
<b>Treatment-related adverse events (total)</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>5</b>	<b>17</b>
Pyrexia	-	-	1	2	1	1	1	1*	3	4
Headache	-	-	-	-	1	1	1	1	2	2
Chills	-	-	-	-	-	-	1	1	1	1
Hemoglobin decreased	1	1	-	-	-	-	-	-	1	1
Platelet count increased	1	1	-	-	-	-	-	-	1	1
Rash	1	1	-	-	-	-	-	-	1	1
Myalgia	-	-	-	-	-	1	-	-	1	1
Arthralgia	-	-	-	-	-	-	1	1	1	1
Fatigue	-	-	-	-	1	1	-	-	1	1
Abdominal pain	-	-	-	-	1	1	-	-	1	1
Frequent bowel movements	-	-	-	-	1	1	-	-	1	1
Diarrhea	-	-	-	-	-	-	1	1	1	1
Weight increased	-	-	-	-	-	-	1	1	1	1

As of the cutoff date of July 21, 2022, length of follow-up ranged from 14.1 weeks to 23 months.

\*Grade 2 pyrexia in Subject 8

MedDRA, Medical Dictionary for Regulatory Activities; LTFU, long-term follow-up; vg/kg, vector genomes per kilogram of body weight.






Isaralgagene civaparvovec (ST-920) continued to be generally well tolerated

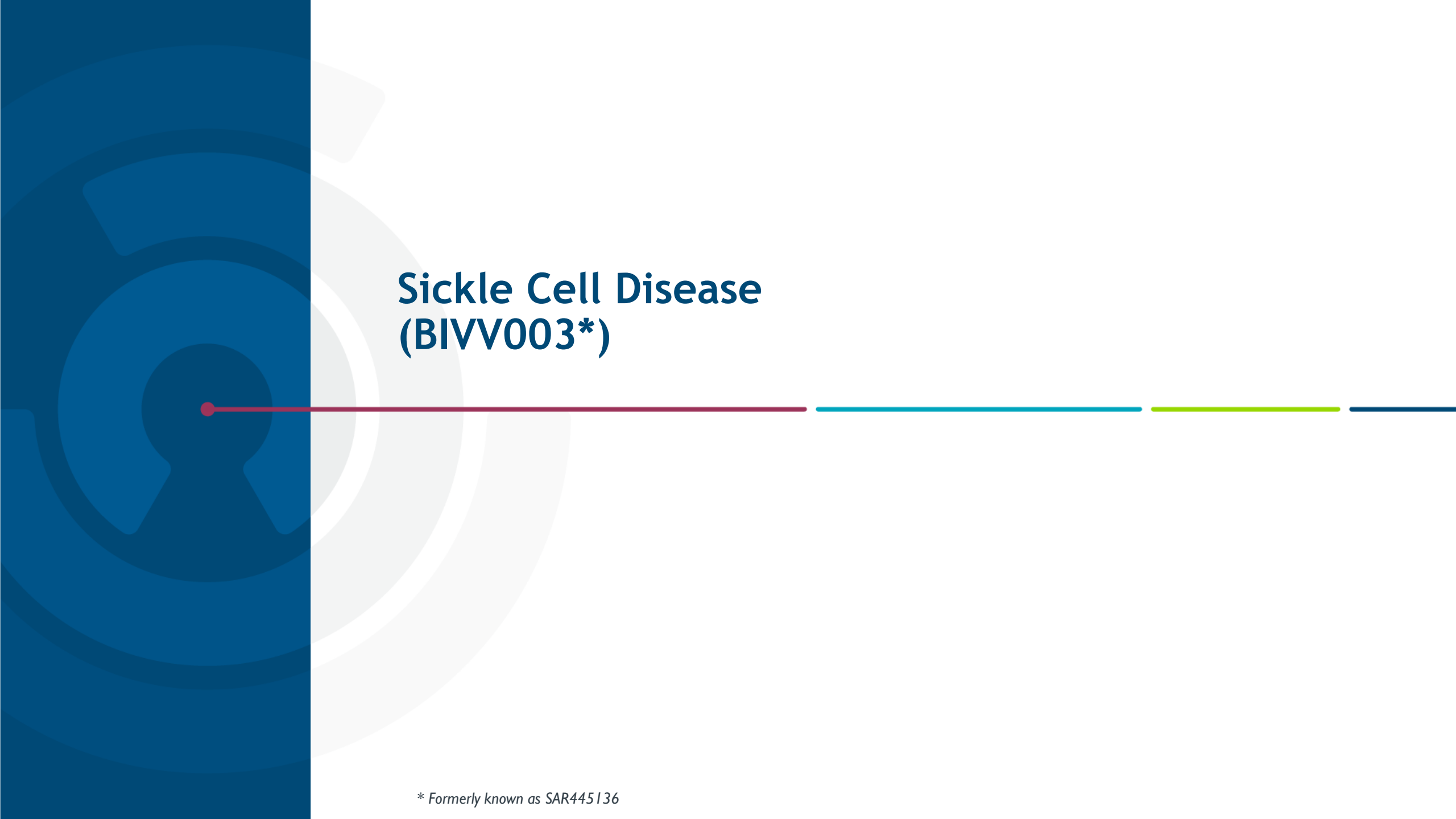
No subjects have been treated with steroids, either prophylactically or reactively

No treatment-related serious adverse events were reported

All treatment-related adverse events were Grade 1 (mild) with the exception of one pyrexia Grade 2 (moderate)

# Fabry disease: STAAR Study Baseline Subject Characteristics

	Cohort 1 (n=2) 0.5e13 vg/kg		Cohort 2 (n=2) 1.0e13 vg/kg		Cohort 3 (n=3) 3.0e13 vg/kg			Cohort 4 (n=2) 5.0e13 vg/kg	
	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	Subject 6	Subject 7	Subject 8	Subject 9
Age (years)	48	25	42	22	39	42	51	49	40
On ERT	Yes  (withdrawn March 2022)	No; pseudo-naïve	No; pseudo-naïve	Yes  (withdrawn Nov 2021)	Yes  (withdrawn May 2022)	Yes  (withdrawn June 2022)	Yes  (withdrawn August 2022)	No (Naive)	No (Naive)
Primary disease signs and symptoms	<ul style="list-style-type: none"> <li>• Hypohidrosis</li> <li>• Tinnitus and vertigo</li> <li>• Left ventricular hypertrophy</li> <li>• Palpitations</li> <li>• Anemia</li> <li>• Leg edema</li> </ul>	<ul style="list-style-type: none"> <li>• Anhidrosis</li> <li>• Tinnitus</li> <li>• Acroparesthesia†</li> <li>• Sinus bradycardia</li> <li>• Left ventricular hypertrophy</li> </ul>	<ul style="list-style-type: none"> <li>• Hypohidrosis</li> <li>• Tinnitus and vertigo</li> <li>• Acroparesthesia†</li> <li>• ECG sinus arrhythmia</li> </ul>	<ul style="list-style-type: none"> <li>• Hypohidrosis</li> <li>• Neuropathic pain</li> <li>• Aortic root dilation</li> </ul>	<ul style="list-style-type: none"> <li>• Tinnitus</li> <li>• High frequency hearing loss</li> <li>• Acroparesthesia</li> <li>• Sinus bradycardia</li> </ul>	<ul style="list-style-type: none"> <li>• Hypohidrosis</li> <li>• Tinnitus</li> <li>• Neuropathic pain</li> <li>• Acroparesthesia</li> </ul>	<ul style="list-style-type: none"> <li>• Depression</li> <li>• Ventricular tachycardia</li> <li>• Hearing loss</li> <li>• Neuropathic pain</li> </ul>	<ul style="list-style-type: none"> <li>• Tinnitus</li> <li>• Mild ventricular hypertrophy</li> <li>• Acroparesthesia</li> </ul>	<ul style="list-style-type: none"> <li>• Mild ventricular wall thickness</li> </ul>
Mutation	G261D	T141I	W340R	S297Y	Q283X	N215S	c.801+3A>G	P362L	T141I



## Sickle Cell Disease (BIVV003\*)

*\* Formerly known as SAR445136*

# Sickle Cell Disease: BIVV003\* Efficacy

PRECIZN-I Data presented at ASH on December 12, 2021 (Abstract #2930)

**Preliminary proof-of-concept Phase I/2 data demonstrate therapeutic potential of BIVV003 in sickle cell disease**

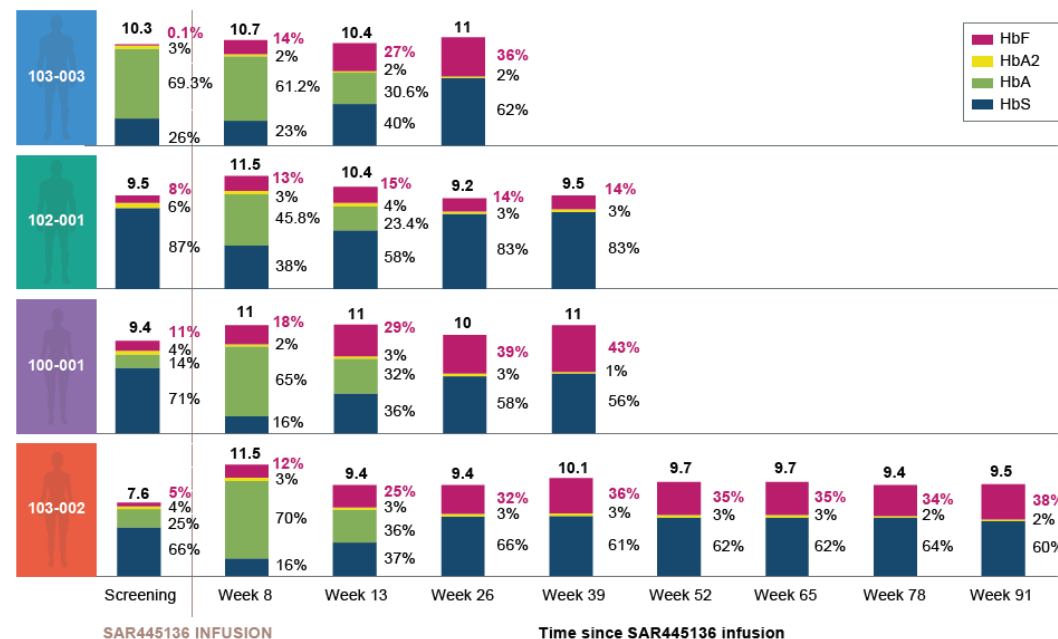
Data from the PRECIZN-I study presented at ASH 2021. As of the September 22, 2021, cutoff date:

None of the 4 treated patients required blood transfusions post engraftment

All 4 treated patients experienced increases in total hemoglobin (Hb), fetal hemoglobin (HbF) and percent F cells

## Total Hb and Hb Fractionation in all Patients After BIVV003 Infusion

Figure 3. Total Hb and Hb fractionation in all patients after SAR445136 infusion



Total Hb: Stabilized by Week 26 in all 4 patients

Percent HbF levels increased:

- Screening: 0.1-11%
- Week 26: 14-39%
- Week 91: 38% in the longest-treated patient

Percent F cells increased:

Week 26: Increased to 48-94% in all four infused patients, persisting at 99% in the patient with 91 weeks of follow-up

Presented at ASH on December 12, 2021 (Abstract #2930)

# Sickle Cell Disease: BIVV003 Safety Data

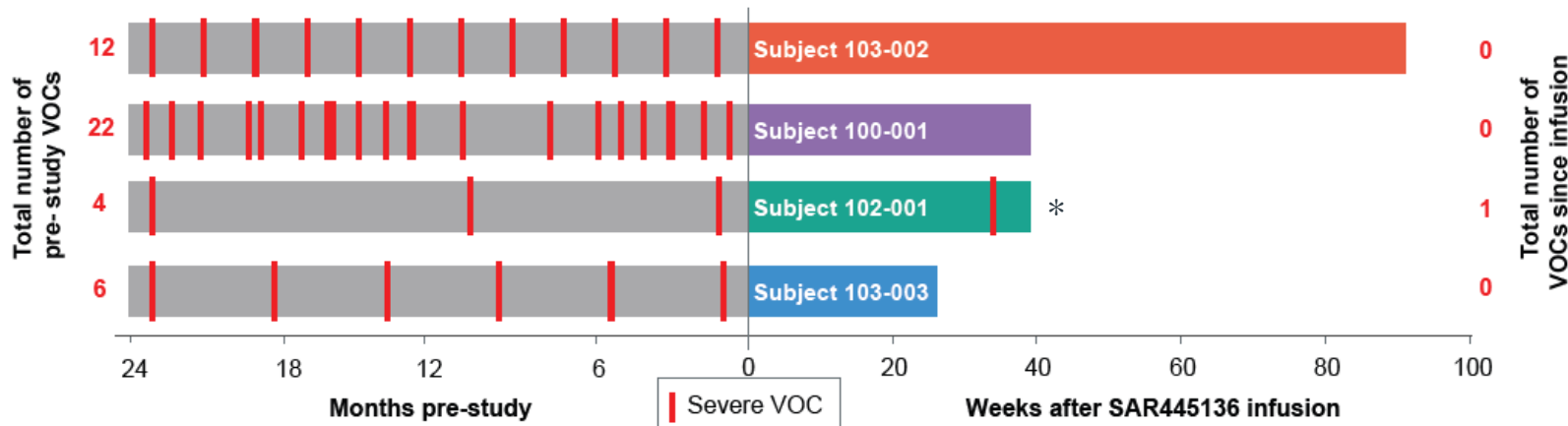
PRECIZN-1 data presented at ASH on December 12, 2021 (Abstract #2930)

## Baseline Characteristics and Clinical History

Subject	103-002	100-001	102-001	103-003
Genotype	HbSB0	HbSS	HbSS	HbSS
Gender	Female	Female	Male	Male
Race	African American	African American	African American	African American
Age at consent, years	35	20	18	25
Pain crises, #events/2 years	10	22	0	6
Disease modifying medications, Y/N	N	Y*	Y*	N
Chronic RBC transfusion therapy, Y/N	N	Y	Y	Y

\*Hydroxyurea RBC, RED blood cell

## Number of VOCs Reported Pre- and Post-Infusion



VOC, vaso-occlusive crisis

As of September 22, 2021 cutoff date

\* Patient subsequently experienced 2<sup>nd</sup> VOC, approx. 16 months post treatment

As at September 22, 2021 cutoff:

No adverse events (AEs) assessed as related to BIVV003 through 91 weeks of follow-up for the longest treated patient.

One serious AE of sickle cell anemia with crisis (vaso-occlusive crisis or VOC) was reported ~9 months after treatment in 1 patient.

No other SCD-related events were reported in the 4 patients post-infusion.

## Since ASH 2021

Second VOC reported in the same patient that had achieved lowest levels of fetal hemoglobin (~16 months after treatment).

Sixth patient dosed. Now two patients have received product candidate manufactured with improved process.



# Hemophilia A (giroctocogene fitelparvovec)

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**Sangamo**  
THERAPEUTICS

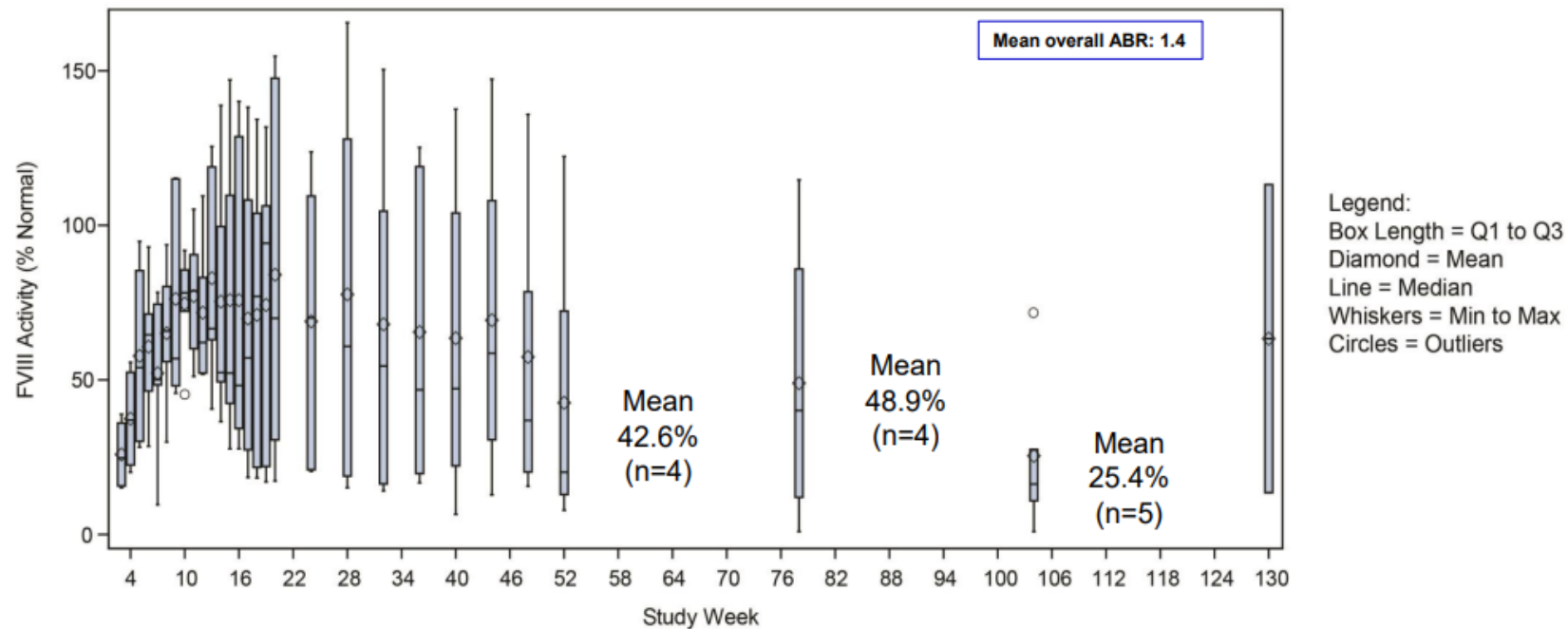
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 **Pfizer**

# Hemophilia A: Efficacy Data (Highest Dose Cohort)

Phase 1/2 ALTA data presented at ASH on December 12, 2021 (Abstract #564)

Factor VIII Activity Levels as Measured by Chromogenic Assay for the Highest Dose Cohort



- 0 bleeding events occurred in the first year post-infusion
- Mean overall ABR = 1.4 (n=5 participants with  $\geq 2$  years of follow-up)

As of the October 1, 2021, cutoff date:

At 104 weeks, the 5 patients in the highest dose  $3 \times 10^3$   $\mu\text{g/kg}$  cohort had mean factor VIII (FVIII) activity of 25.4% via chromogenic clotting assay

In this cohort, mean annualized bleeding rate (ABR) was 0.0 in the first-year post-infusion and was 1.4 throughout the total duration of follow-up

All bleeding events occurred after week 69 post-infusion. 2 patients experienced bleeding events necessitating treatment with exogenous FVIII

No participants in the highest dose cohort have resumed FVIII prophylaxis

## Hemophilia A: Safety Data

*Phase 1/2 ALTA data presented at ASH on December 12, 2021 (Abstract #564)*

As of the October 1, 2021, cutoff date:

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Among the 5 patients in the highest dose cohort, 4 received corticosteroids for liver enzyme (ALT/AST) elevations. All elevations fully resolved with oral corticosteroids

As previously reported, 1 patient in the highest dose cohort had a treatment-related serious adverse event of hypotension (grade 3) and fever (grade 2), with symptoms of headache and tachycardia, which occurred 6 hours post-infusion with giroctocogene fitelparvovec and resolved ~12 hours post-infusion

No other treatment-related serious adverse events were reported as of the cutoff date

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**Giroctocogene  
fitelparvovec  
was generally  
well tolerated**

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No confirmed FVIII  
inhibitor development

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No thrombotic  
events reported

## Phase 3 AFFINE Study in Hemophilia A

### Program transitioned to Pfizer for phase 3 development

Open label, global, single-arm study of  
giroctocogene fitelparvovec gene therapy

Primary endpoint is impact on annual bleed rate,  
or ABR, through 12 months following treatment.  
This will be compared to Factor VIII  
replacement therapy collected in the Phase 3  
lead-in study, which will provide a baseline for  
Phase 3 study participants

Participants will be analyzed throughout the 5-  
year study period following the single infusion  
to further assess safety, durability and efficacy

## AFFINE is more than 50% enrolled

This trial was previously paused when  
some patients experienced FVIII  
expression greater than 150% following  
treatment.

Trial sites resumed enrollment in  
September, and dosing is expected to  
resume shortly.

A pivotal readout is expected in the first  
half of 2024.

# Second-Generation Programs

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Autoimmune & Neurology Programs  
Capitalize on Advancements in Cell  
Therapy and Zinc Finger Genome  
Engineering Platform

# Sangamo's Second-Generation Programs

Trailblazer CAR-T<sub>REG</sub> program leverages expertise in ex vivo cellular engineering, manufacturing, and T<sub>REG</sub> biology to establish a leading position in T<sub>REG</sub> development

Neurology portfolio leverages knowledge of zinc finger genome engineering and domain expertise of partners to assemble a strong pipeline of CNS-targeted clinical candidates

## CAR-T<sub>REG</sub> Cell Therapy Platform

### Auto Renal Transplant (TX200)

Phase 1/2

FIRST TWO PATIENTS DOSED IN PROOF-OF-CONCEPT STUDY

### Allo Renal Transplant

Preclinical



### Inflammatory Bowel Disease

Preclinical

### Multiple Sclerosis

Preclinical

## Neurology Genome Engineering Platform

### Prion

Preclinical



### Neurology (3 Undisclosed)

Preclinical



### ALS / FTD

Preclinical



### Huntington's Disease

Preclinical



### Neuro-developmental Disorders

Preclinical



### Tauopathies, Synucleinopathies, DMI, Undisclosed

Preclinical

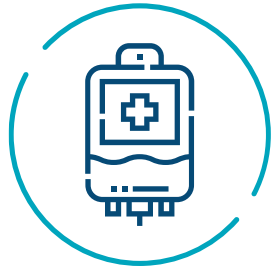


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# CAR-T<sub>REG</sub> Cell Therapy in Autoimmunity



# CAR-T<sub>REG</sub> Cell Therapy in the Clinic: TX200 for Renal Transplantation



**TX200**

Single infusion

Autologous HLA-A2 specific CAR-T<sub>REG</sub> cell therapy

## Therapeutic hypothesis and goals:

Promote immunological tolerance to renal graft

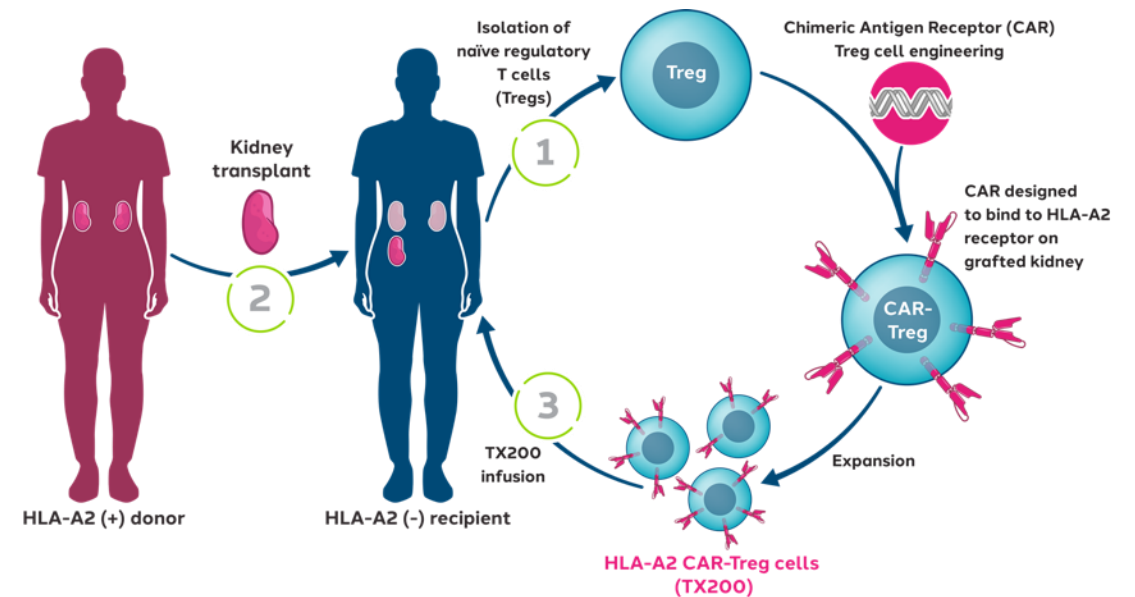
Help preserve graft function and reduce graft loss

Reduce need for systemic immunosuppressive therapy

## HLA-A2 Mismatched Renal Transplant

~46,000 renal transplantations expected in 2021 (US + EU)<sup>1</sup>

21-26% of transplanted organs are estimated to be HLA-A2 mismatched<sup>2</sup>



**TX200 administration to take place following transplantation; the time from pre-transplant through TX200 administration may be several months**

# Phase 1/2 Study Evaluating TX200 in Renal Transplantation



Second patient dosed in September 2022



Two control patients have been enrolled and transplanted. Site openings and patient screenings ongoing.



Further guidance will be provided after scheduling of transplant for patient 3.

## Entry Criteria

Male or female subjects aged 18-70 years, diagnosed with End Stage Renal Disease (ESRD) and waiting for a new kidney from an identified living donor

HLA-A2 mismatch between kidney donor and kidney recipient

## Primary Objective

Assess safety and tolerability of TX200

## Secondary Objectives

**Assess** incidence of acute graft rejection (confirmed by biopsy) and chronic graft rejection

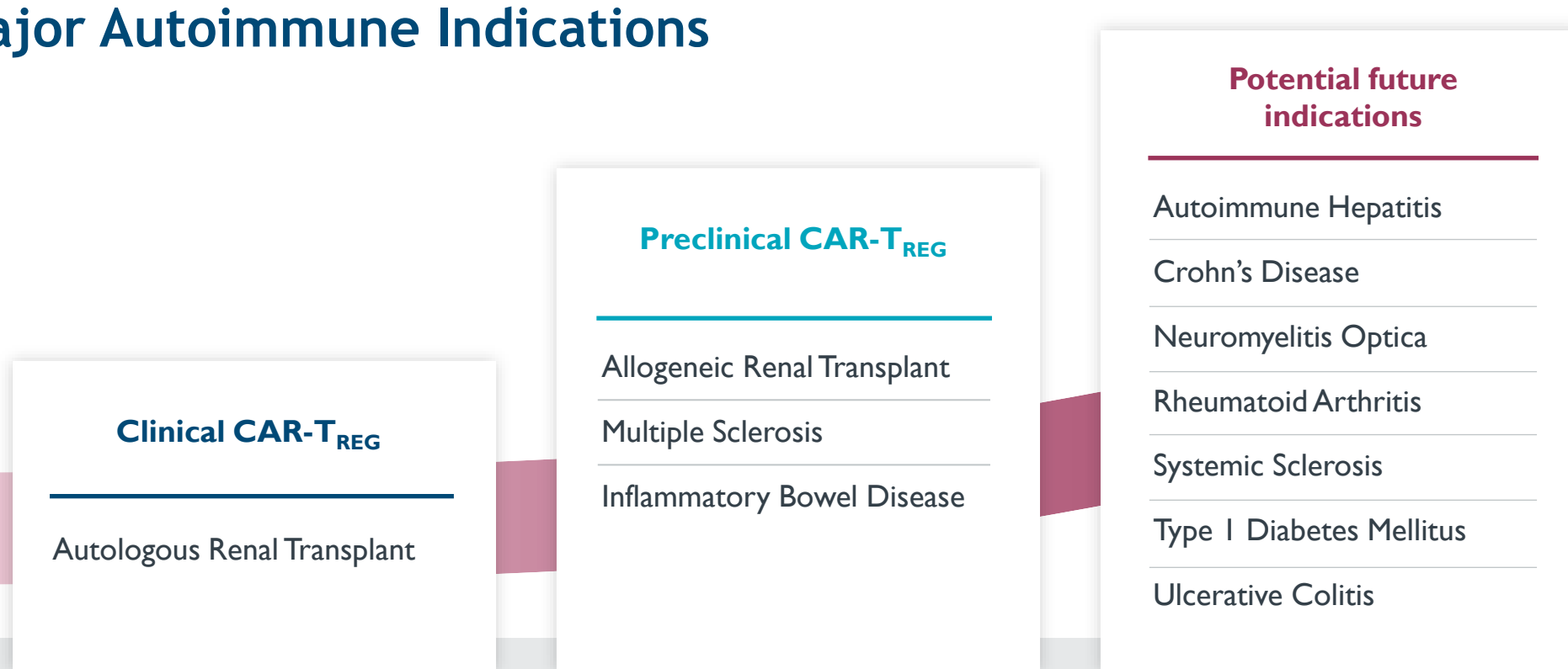
**Assess** ability of TX200 to reduce need for immunosuppressive therapy up to 84 weeks

**Assess** localization of TX200 cells in the transplanted kidney

**Assess** impact of TX200 on chronic graft-related outcomes

TX200 is designed to help the recipient accept their donated kidney and prevent their immune system from rejecting it, thereby reducing the need for systemic immunosuppressive therapy

# Pioneering TX200 Program Establishes Manufacturing and T<sub>REG</sub> Engineering Expertise for Potential Future Expansion into Major Autoimmune Indications



## Cell Therapy Strategy

### CURRENT

Seeks to provide potential proof-of-concept for CAR-T<sub>REG</sub> cell therapy

Aims to establish key manufacturing & QC processes

### FUTURE

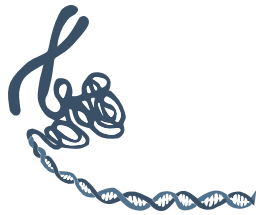
Leverage ZF genome engineering expertise to potentially advance allogeneic and functionally-enhanced CAR-T<sub>REGS</sub>

Foundation upon which to potentially expand the addressable market

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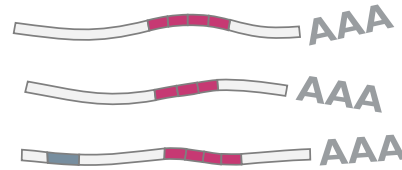
# Zinc Finger Genomic Engineering for Neurology

# ZFP-TFs Target Upstream at the Source of Mutant Protein Isoforms and Complexes Offering Advantages over Today's Symptomatic Approaches



**DNA**

Mutant allele



**RNA**

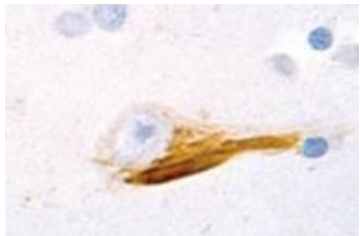
Sense, antisense, mis-spliced



**Protein**

Varied and complex

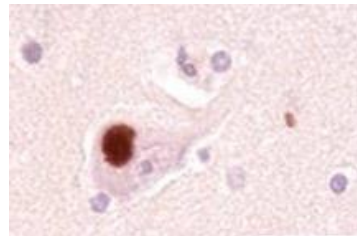
## TAUOPATHIES



Tau



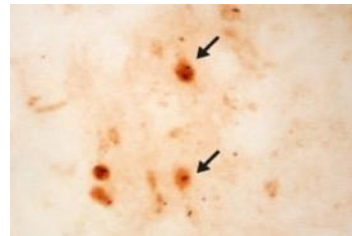
## PARKINSON'S DISEASE



$\alpha$ -Synuclein



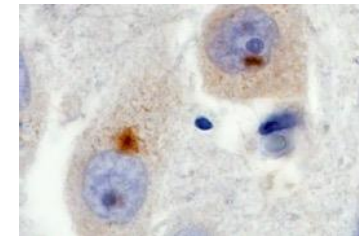
## HUNTINGTON'S DISEASE



Huntingtin



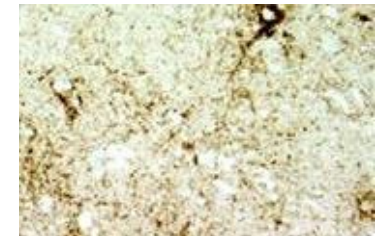
## ALS



C9orf72



## PRION DISEASE



Prion



Hill et al., 2003

Jucker & Walker 2013

Irwin et al., 2015

Waldvogel et al., 2014

# Sangamo Genomic Medicine Platform

# Sangamo's Differentiated ZF Genomic Engineering Platform

## Versatile, modular, customizable

Flexible configuration and  
multiple functionalities

## High activity and specificity

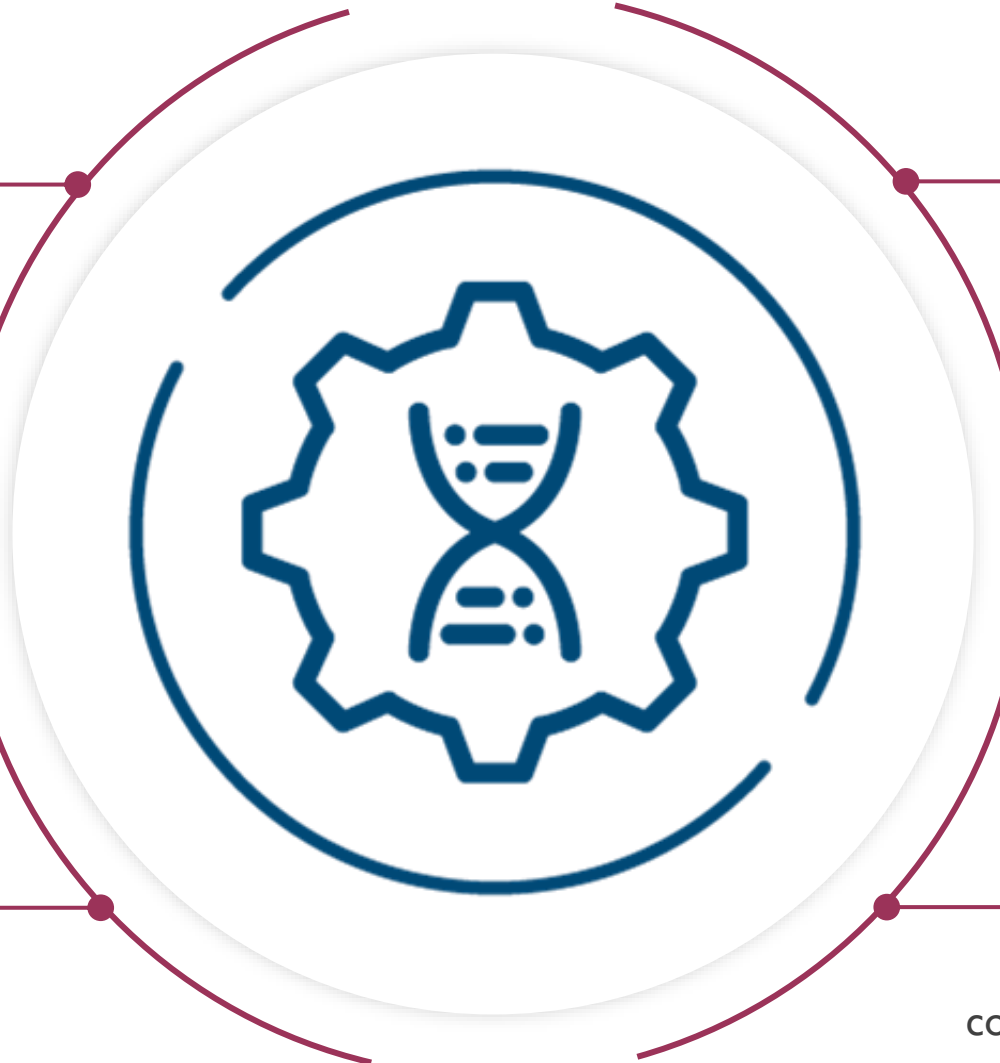
Tunable and optimizable  
DNA:protein interface

## High-resolution targeting

Genome-wide coverage, no restrictions

## Compact

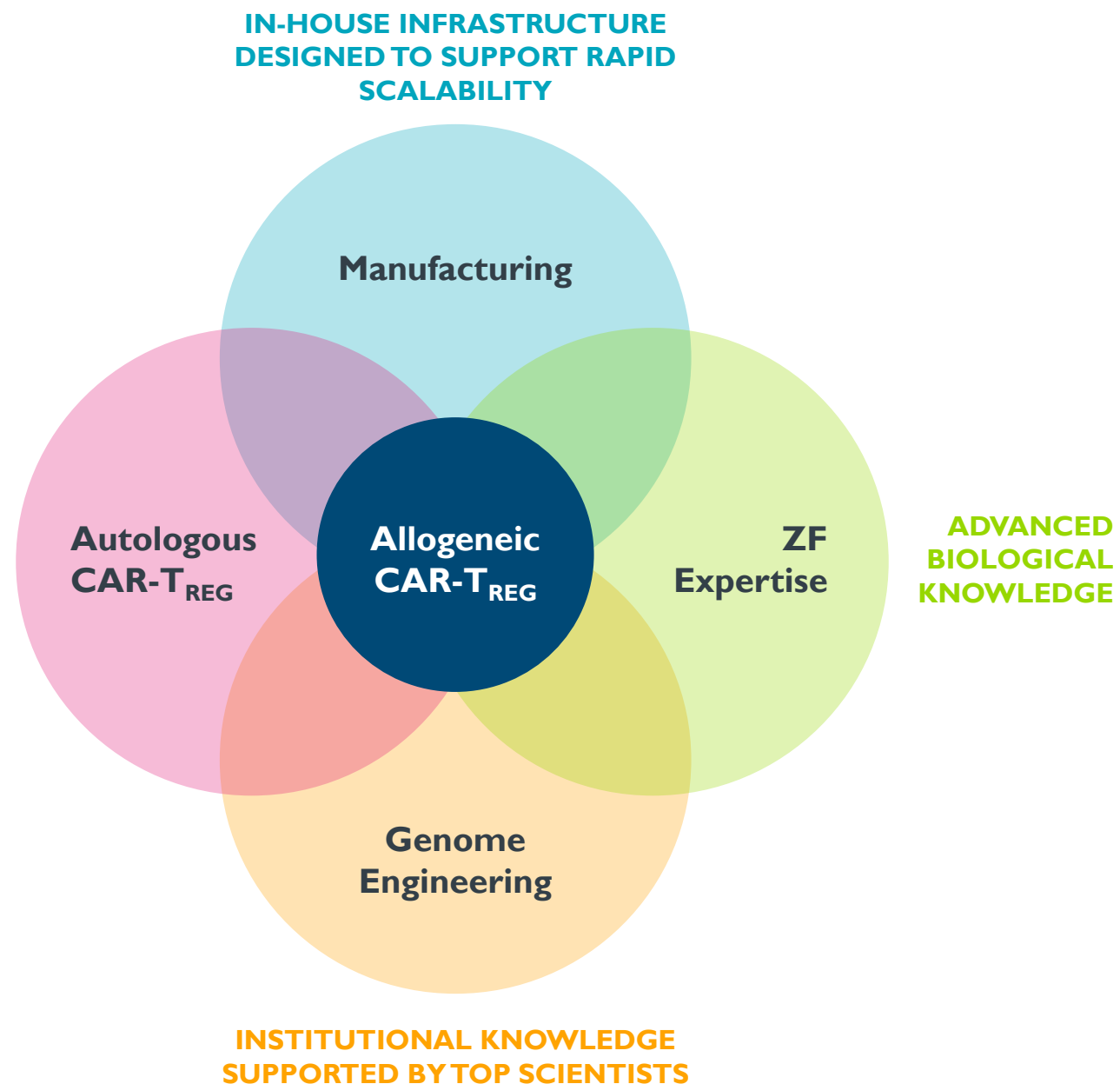
Improved delivery vector  
compatibility and genome accessibility





# Synergies among Multiple Technology Platforms Support a Potentially Leading Foundation for Allogeneic CAR-T<sub>REG</sub>

SEEKS TO  
ESTABLISH CELL  
THERAPY  
PROTOCOLS AND  
KNOW-HOW



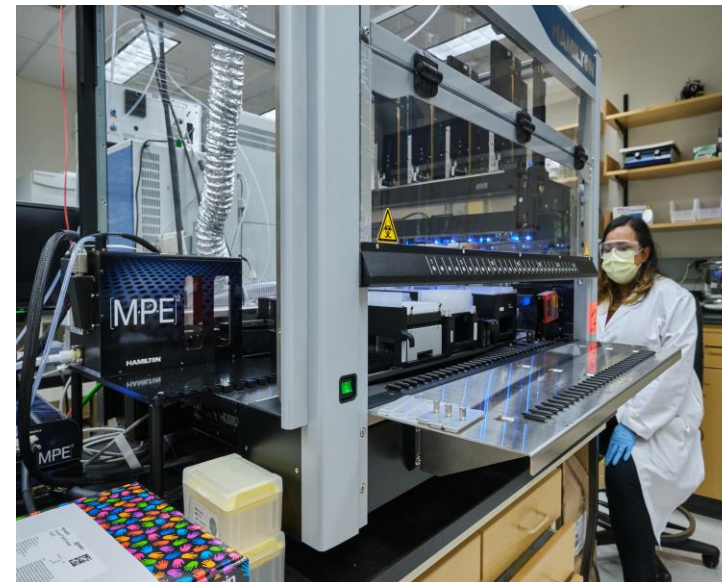
## In-House Cell Therapy and AAV Manufacturing GMP Facilities & Deep Manufacturing Expertise Provide the Infrastructure to Execute on Our Clinical Strategy



AAV and Cell  
Therapy manufacturing  
capabilities in-house



Opened new  
state-of-the-art GMP  
facilities in 2021



Dedicated access to AAV capacity up  
to 2000-L bioreactor scale with  
CDMO partners provides flexibility  
in manufacturing scale

In-house capabilities in US and France, and line of sight across manufacturing operations from procurement to release enables greater control over quality, supply, cost, timeline and IP.

# Key Highlights of Sangamo's Manufacturing Capabilities



## **Flexibility and control**

High degree of quality control for vector and cell therapy applications



## **Capacity to support R&D needs**

Balanced infrastructure designed to support achievement of critical milestones



## **Process expertise**

Supported by highly experienced technical operations team



## **Geographic diversification**

US and EU sites provide supply chain resiliency



## **Deep intellectual property portfolio**

Proprietary archive of ZFP modules, ~200 patent families, and trade secrets / know-how

## Our ESG Commitment

Sangamo strives to mitigate the environmental impact of our operations, promote diversity and inclusion in our workforce and govern our company responsibly and transparently

### Environment

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Sangamo's headquarters in Brisbane is LEED certified, meaning it meets the requirements of a green building set by the U.S. Green Building Council

### Social

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Diversity, Equity and Inclusion (DEI) working group continues to advance internal initiatives

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Instituted DEI metrics to better track diversity initiatives and results

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Focus on DEI in recruitment and retention

### Governance

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Majority independent Board oversees risk and strategy

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Separate Chair and CEO

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Three new independent directors added in the last three years

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Board is 29% female and 14% from underrepresented communities

# Platform Validating Partnerships

## Multiple Biopharma Collaborations Validate the Platform's Capabilities and Provide Significant Economics for Sangamo

### GENETHERAPY



### CELL THERAPY



### GENOME ENGINEERING



**~\$815M**  
received in cash

**\$6.7B**  
in potential milestones

**Potential  
royalty payments**

## Numerous Benefits of Partnerships:

Large Pharma buy-in validates second-gen mechanistic approach

Provides non-dilutive capital to advance pipeline

Leverages partner domain expertise

Promotes optimal resource allocation to advance late-stage clinical development

# Upcoming Milestones and Financial Overview



## Looking Ahead to Expected Continued Momentum



### Fabry Disease

- Continued dosing in Phase 1/2 expansion
- Updated Ph 1/2 data, including first data from expansion cohort, expected 1H 2023
- Ph 3 planning

### Renal Transplant (TX200)

- Updated guidance on dosing of third patient, once transplant has been scheduled

### Sickle Cell Disease

- Updated Ph 1/2 data at ASH, December 2022
- Continued dosing in Phase 1/2
- Ph 3 planning

### Hemophilia A



- Updated Ph 1/2 data at ASH, December 2022
- Pivotal data readout estimated in 1H 2024

# Strong Financial Position Supports Progression of Pipeline Towards Value Inflection Points

## Key Financial Metrics

**\$350.3m**

Cash and Marketable  
Securities Balance  
as of 09/30/22

**\$815m**

Cash Received from  
Partners to date

**\$6.7bn**

Potential Payments  
from Milestones...

**Potential  
Upside**

... from  
royalty payments

## Q3 2022 Financial Performance / Financial Guidance for 2022

**\$26.5m**

Revenues -  
Q3 2022

**\$73.5m**

Non-GAAP OpEx\* -  
Q3 2022

**\$280–\$290m**

Non-GAAP OpEx Guidance\*\* -  
FY 2022

\* GAAP total operating expenses were \$81.3 million for Q3 2022, compared to \$77.0 million for Q3 2021 and included stock-based compensation expense ("SBC") of \$7.9 million and \$9.5 million, respectively.

\*\* On a GAAP basis we expect our 2022 operating expenses to be in the range of \$315 - \$325 million including anticipated SBC of approximately \$35 million.

# Value Thesis

01

First-generation product candidates for Fabry Disease, Sickle Cell Disease and Hemophilia A **in or advancing into late-stage clinical development**; provide insights for second-generation programs

02

Innovative second-generation candidates applying **differentiated genomic medicine capabilities** in cell therapy and genome engineering, with a focus in autoimmunity and neurology

03

**Expansive R&D discovery engine** supported by long history of innovation



04

**Five technology-validating blue chip biopharma partners** offer domain expertise, up-front payments and a pathway to potential milestone payments

05

**In-house cGMP manufacturing facilities** provide control over quality, supply, timelines, cost and IP

06

Strong financial position to **take us through our key upcoming expected catalysts**