

# SGT-212 IND Clearance Conference Call

January 2025

# Forward Looking Statement

This presentation contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding future expectations, plans and prospects for the company; the ability to successfully achieve and execute on the company’s goals, priorities and achieve key clinical milestones; the company’s SGT-212 program, including expectations for CTA filings, clinical development, initiation and enrollment in clinical trials, routes of administration, dosing, and availability of clinical trial data;; and other statements containing the words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “would,” “working” and similar expressions. Any forward-looking statements are based on management’s current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in, or implied by, such forward-looking statements. These risks and uncertainties include, but are not limited to, risks associated with the company’s ability to advance SGT-003, SGT-212, SGT-501, SGT-401 and other programs and platform technologies on the timelines expected or at all; obtain and maintain necessary and desirable approvals from the FDA and other regulatory authorities; replicate in clinical trials positive results found in preclinical studies and early-stage clinical trials of the company’s product candidates; obtain, maintain or protect intellectual property rights related to its product candidates; compete successfully with other companies that are seeking to develop Friedreich's ataxia, Duchenne and other neuromuscular and cardiac treatments and gene therapies; manage expenses; and raise the substantial additional capital needed, on the timeline necessary, to continue development of SGT-003, SGT-212, SGT-501, SGT-401 and other candidates, achieve its other business objectives and continue as a going concern. For a discussion of other risks and uncertainties, and other important factors, any of which could cause the company’s actual results to differ from those contained in the forward-looking statements, see the “Risk Factors” section, as well as discussions of potential risks, uncertainties and other important factors, in the company’s most recent filings with the Securities and Exchange Commission. In addition, the forward-looking statements included in this presentation represent the company’s views as of the date hereof and should not be relied upon as representing the company’s views as of any date subsequent to the date hereof. The company anticipates that subsequent events and developments will cause the company’s views to change. However, while the company may elect to update these forward-looking statements at some point in the future, the company specifically disclaims any obligation to do so.

This presentation contains estimates and other statistical data made by independent parties and by us relating to market size and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such data and estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.



# SGT-212

Friedreich's Ataxia (FA)

# SGT-212 Leverages Precision Targeting to Address the Needs of Patients



Organ-specific delivery  
via dual route  
administration



Potential to address both  
cardiac & neurological  
manifestations of disease



Realtime MRI verifies  
precision neuroanatomical  
targeting



Designed to address the  
critical needs of patients at  
any point in their FA journey

... With this novel approach, directed administration targeting the primary sources of debilitating symptoms and mortality has the potential to

## REDEFINE PRECISION MEDICINE



# Solid has Built Robust Understanding and Expertise in FA Through Extensive Preclinical Work in NHPs



Substantial in-house preclinical work and preclinical studies by collaborators have been conducted across multiple candidates, routes of administration & dose levels

## Overall NHP Studies Performed

9 NHP studies conducted in total across 4 different development candidates

n=120+ NHPs tested

Range of dose levels tested across 4 routes of administration (IV, IT, IV & IT, IV & IDN)

Follow-up time as long as 365 days post dose (including SGT-212)

## SGT-212 NHP TOX STUDY FINDINGS

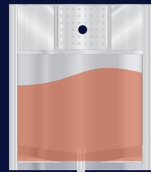
- ✓ Dose-dependent & long-term biodistribution in NHP tissues was associated with corresponding transgene expression in the heart, dentate nucleus, and DRG
- ✓ The precision MRI-guided IDN injection procedure was safe and well tolerated by the NHPs
- ✓ The proposed clinical IDN and IV dose levels demonstrated no treatment-related findings (both in CNS and non-CNS)
- ✓ The proposed clinical IDN and IV dose levels elicited therapeutically relevant levels of FXN expression

# Introducing SGT-212: A Revolutionary Approach Using Dual Administration to Address Both Neurologic and Cardiac Manifestations of FA

SGT-212 is the only FA gene therapy using dual route of administration to obtain FDA IND clearance

## Intravenous (IV) Infusion

- Focused on treating largest cause of mortality in Friedreich's ataxia: cardiomyopathy
- Potential to treat other disease-relevant organ systems



## Direct Dentate Nuclei (IDN) Infusion\*

- Removes challenges of crossing blood-brain barrier
- Direct administration targets most disease-critical brain structure with potential to treat ataxia and dysarthria
- MRI imaging during infusion provides exquisite confirmation of delivery



\*Administration simplified for illustrative purposes. Actual SGT-212 IDN administration will use FDA-approved, MRI-guided delivery system.

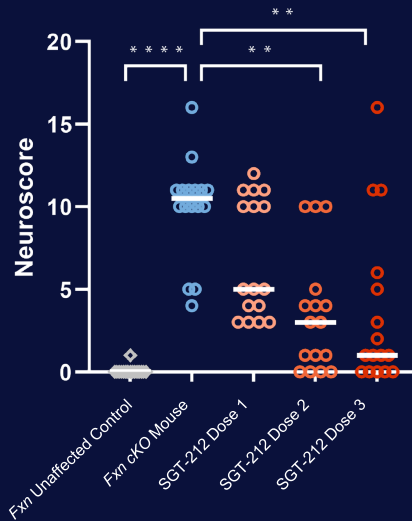
# SGT-212 Systemic Administration Resulted in Significant Neurological and Neuromotor Function Improvements



☑ Neuronal proof-of-concept achieved in disease-relevant knockout mouse model (nKO)

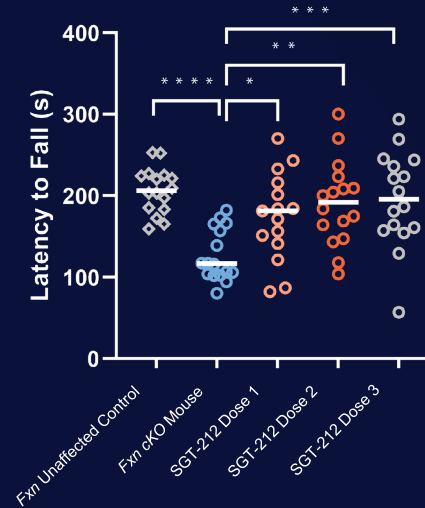
## Neurological Assessment Score

Neuroscore<sup>1</sup> (Day 56)



## Neuromotor Function Assessment

RotaRod<sup>2</sup> (Day 60)



FXN = Frataxin

1. The neurological score assessment was used to assess the severity of ataxia. 2. The RotaRod test evaluates coordination and balance by measuring the time to fall for mice running on a spinning rod that progressively accelerates – a decreased latency to fall indicates neuromotor impairment. Data on file. Solid Biosciences 2024.

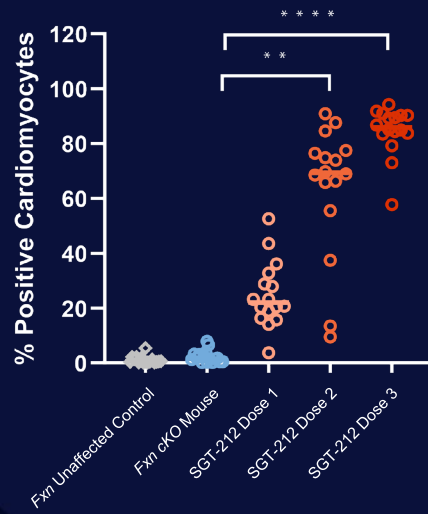
# SGT-212 Systemic Administration Demonstrated Cardiac FXN Expression, Activity and Resolution of Cardiomyopathy Phenotype



✔ Cardiac proof-of-concept achieved in disease-relevant knockout mouse model (cKO)

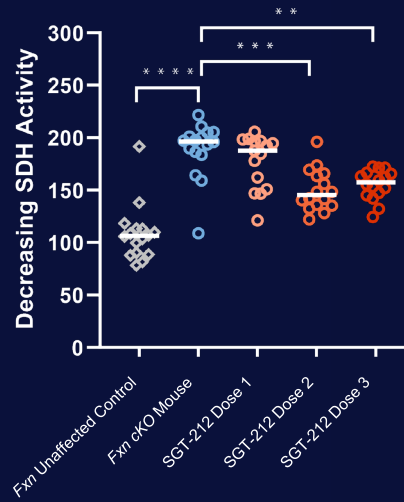
## FXN Cardiac Expression

In Situ Hybridization in Heart



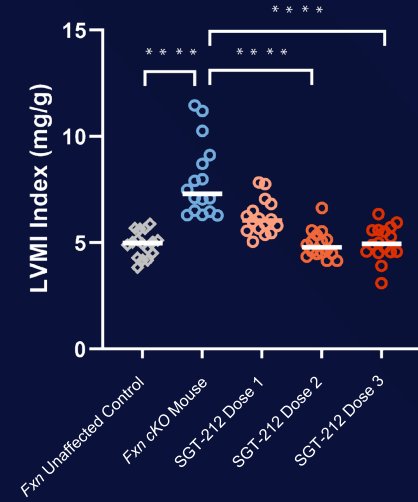
## Mitochondrial Function

Succinate Dehydrogenase (SDH)



## Indicator of Cardiac Structure

Left Ventricular Mass Index (Day 30)\*



\*Research has indicated that increased LVMI is correlated with increased risk of all-cause mortality (Pousset F, et al. 2015)

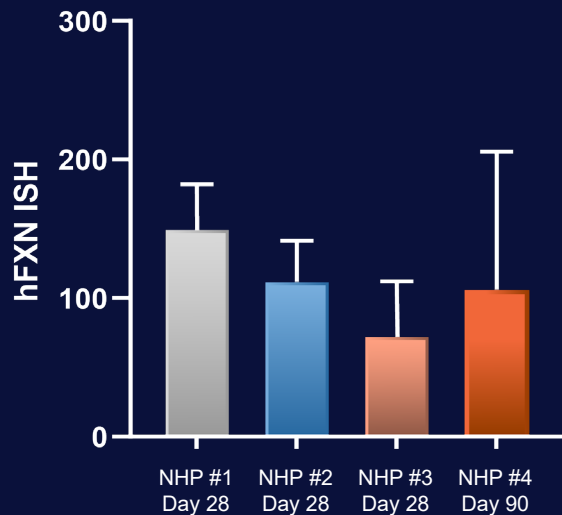


# IDN Administration of SGT-212 Resulted in Safe and Robust *Fxn* Expression in the Cerebellum in NHPs at Clinically Relevant Dose



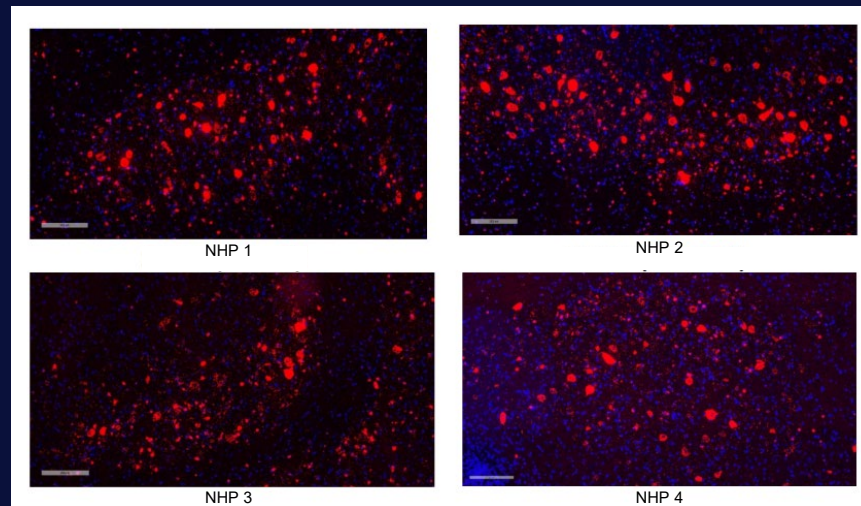
## *hFxn* Expression in Dentate Nuclei (Cerebellum)

In Situ Hybridization



## *hFxn* Properly Localized to Dentate Nuclei (Cerebellum)

In Situ Hybridization



■ Human frataxin (*hFxn*)

# Clinical Trial Design: SGT-212 Phase 1b Study

First-in-Human Open-Label, Multi-Center Study to Enroll a Minimum of 6 Participants

Dosing expected to initiate H2 2025



## Objective

### Primary Objective

To evaluate the safety and tolerability of IDN infusion and systemic IV infusion of SGT-212 gene therapy in subjects with FA.

### Exploratory Objectives

Evaluate the effect of SGT-212 on:

- Frataxin protein expression
- Motor function and disability
- Cardiac function
- Speech function



## Design

### Design

Study includes **3 cohorts** based on ambulatory status:

- Cohort 1: Non-Ambulatory Participants
- Cohort 2: Ambulatory Participants
- Cohort 3: Ambulatory and Non-Ambulatory Participants (dose refinement or dose expansion)

All participants are adults with FA with documented cardiac hypertrophy.

SGT 212 delivered by : magnetic resonance imaging (MRI) guided bilateral infusion to the dentate nuclei (DN) and intravenous (IV) infusion.



## Endpoints

### Primary Endpoint

Incidence and severity of TEAEs from Baseline to month 12.

### Exploratory Endpoints

Change from baseline frataxin protein expression in the blood, cardiac and skeletal muscle starting at day 90.

Change from baseline starting at 18 months in key functional tests (e.g. mFARS, 9-hole peg test, timed 25-foot walk, among others).

Change from baseline starting at 12 months in left ventricular structure and function.

# Solid Biosciences Inc.

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