Stoke Therapeutics

NASDAQ: STOK

March 2023

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This presentation contains "forward-looking" statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, including, but not limited to: the ability of our TANGO platform to design medicines to increase protein production and the expected benefits thereof; expectations regarding our aspirations to execute in the clinic with STK-001, advance to the clinic with STK-002, and expand our pipeline through internal discovery and collaboration; the ability of STK-001 to treat the underlying causes of Dravet syndrome and reduce seizures or show improvements in non-seizure comorbidities at the indicated dosing levels or at all; the ability of STK-002 to treat the underlying causes of Autosomal Dominant Optic Atrophy (ADOA); the preclinical data and study results regarding OPA1; our future operating results, financial position and liquidity; our expectations about timing and execution of anticipated milestones, responses to regulatory authorities, expected nomination of future product candidates and timing thereof; and our expectations, plans, aspirations and goals, including those related to the goals of our collaboration with Acadia. These forward-looking statements may be accompanied by such words as "aim," "anticipate," "believe," "could," "estimate," "expect," "forecast," "goal," "intend," "may," "might," "plan," "potential," "possible," "will," "would," and other words and terms of similar meaning. These forward-looking statements involve risks and uncertainties, as well as assumptions, which, if they do not fully materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such statements, including, but not limited to, risks and uncertainties related to: our ability to develop, obtain regulatory approval for and commercialize STK-001, STK-002, and future product candidates, including any future product candidates nominated for SYNGAP1 or MECP2; the timing of data readouts and interim and final results of preclinical studies and clinical trials; positive results in a clinical trial may not be replicated in subsequent trials or success in early stage clinical trials may not be predictive of results in later stage clinical trials; preliminary interim data readouts of ongoing trials may show results that change when such trials are completed; clinical trials, including our ability to adequately manage clinical activities, unexpected concerns that may arise from additional data or analysis obtained during clinical trials, regulatory authorities may require additional information or further studies, or may fail to approve or may delay approval of our drug candidates; the occurrence of adverse safety events; failure to protect and enforce our intellectual property and other proprietary rights; failure to successfully execute or realize the anticipated benefits of our strategic and growth initiatives, including our collaboration with Acadia; our ability to fund development activities and achieve development goals to the end of 2025; technology failures or breaches; our dependence on collaborators, including Acadia, and other third parties for the development, regulatory approval, and commercialization of products and other aspects of our business, which are outside of our full control; the direct and indirect impacts of the ongoing COVID-19 pandemic and its variants on our business; risks associated with current and potential future healthcare reforms; risks relating to attracting and retaining key personnel; failure to comply with legal and regulatory requirements; risks relating to access to capital and credit markets; environmental risks; risks relating to the use of social media for our business; and the other risks and uncertainties that are described in the Risk Factors section of our most recent Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q and in other reports we have filed with the U.S. Securities and Exchange Commission. These statements are based on our current beliefs and expectations and speak only as of the date of this presentation. We do not undertake any obligation to publicly update any forward-looking statements.

By attending or receiving this presentation you acknowledge that you are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date such statements are made; you will be solely responsible for your own assessment of the market and our market position; and that you will conduct your own analysis and be solely responsible for forming your own view of the potential future performance of Stoke.

OUR GOAL:

Upregulate protein expression to treat the underlying cause of severe genetic diseases

Stoke's pipeline offers potential first-in-class disease modifying new medicines for diseases caused by protein insufficiency

STK-001 for Dravet syndrome

A severe and progressive genetic epilepsy

STK-002 for Autosomal Dominant Optic Atrophy (ADOA)

The most common inherited optic nerve disorder

Rett syndrome, Syngap1 syndrome

Severe and rare genetic neurodevelopmental diseases

And beyond…

~6,500 additional genes with TANGO target signatures

Advantages of Stoke's Approach vs. Other Genetic Approaches

Selectively boosts expression only in tissues where the protein is normally expressed

No observed unwanted off-target genetic effects

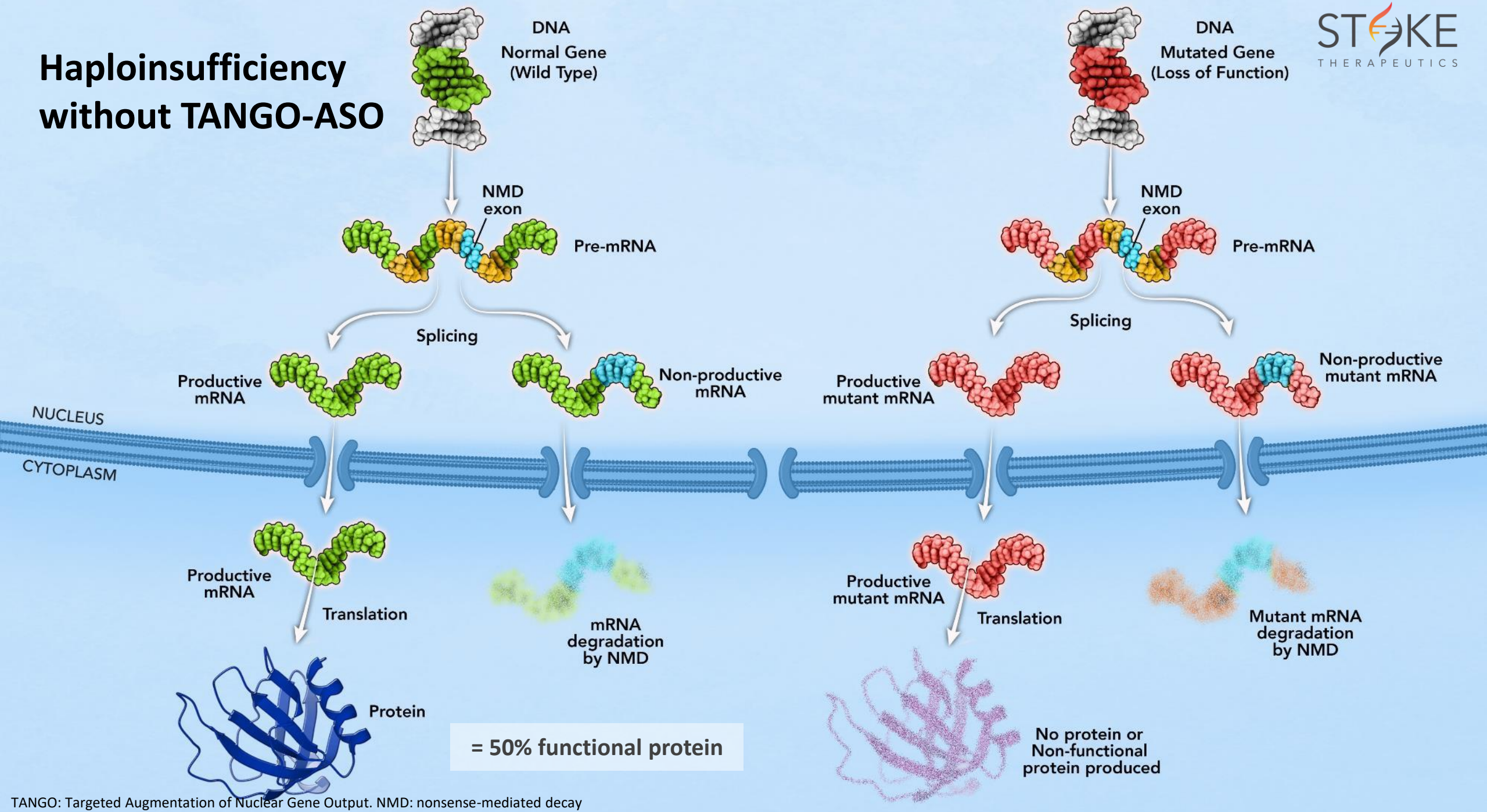
Utility across small and large gene targets and mutations

Does not alter DNA

Ability to control dose level and duration

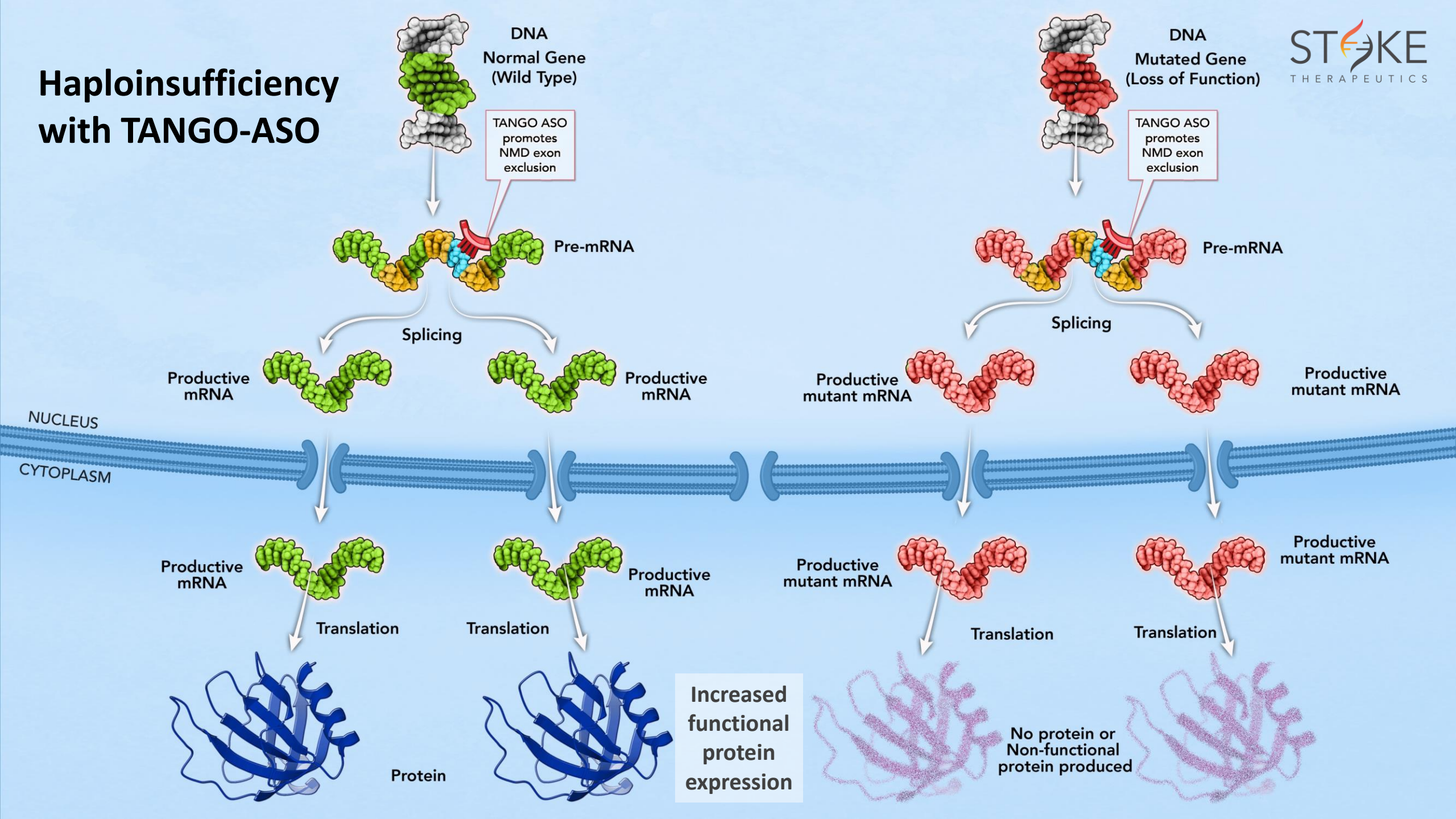
Simple and scalable manufacturing

Haploinsufficiency without TANGO-ASO



TANGO: Targeted Augmentation of Nuclear Gene Output. NMD: nonsense-mediated decay

Haploinsufficiency with TANGO-ASO



Dravet Syndrome: A Severe, Progressive Genetic Epilepsy

85%
of cases caused by a **HAPLOINSUFFICIENCY** of the *SCN1A* gene

RESULTING in

50%
$Na_V1.1$ protein expression

1 out of 16,000
babies are born with Dravet syndrome

Up to 20%
of children and adolescents with Dravet syndrome die before adulthood, due to SUDEP[1], prolonged seizures, seizure-related accidents or infections

Seizures are not adequately controlled in **90%** of people with Dravet syndrome

~35,000
people affected in the U.S., Canada, Japan, Germany, France and the UK

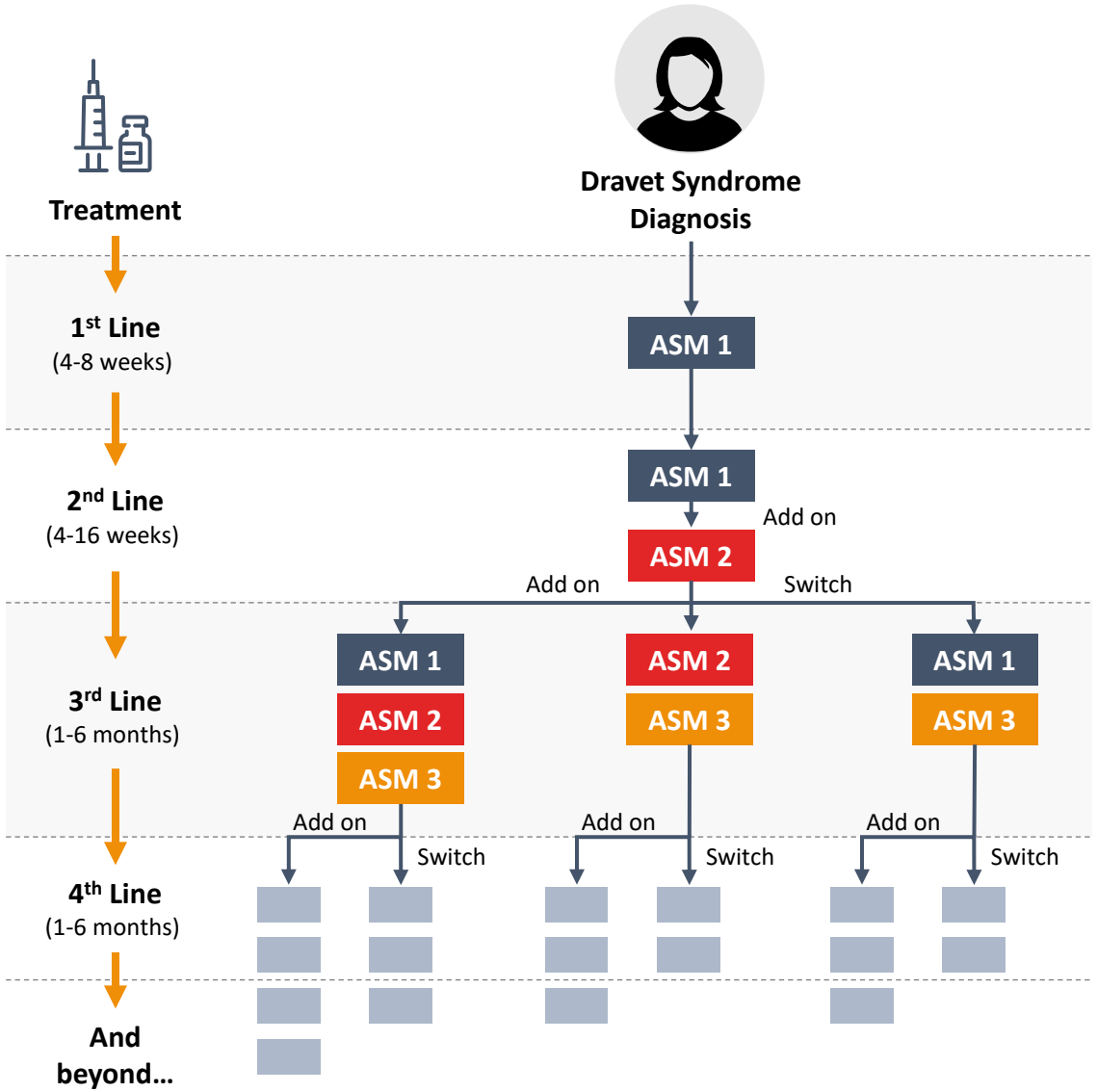
Dravet syndrome is not concentrated in a particular geographic area or ethnic group

[1] Sudden Unexpected Death in Epilepsy

Sources: *2018 Health Advances Report*; Djémié et al., *Molecular Genetics & Genomic Medicine,* 2016; Lagae et al., *Developmental Medicine & Child Neurology,* 2017; Nabbout et al., *Orphanet Journal of Rare Diseases,* 2013

Current Treatment Paradigm is Burdensome and Ineffective

Most patients end up on 3 or more anti-seizure medicines (ASM)



Clinician perspectives on current treatment options

"Eliminating seizures is not possible. We strive for balance between seizure frequency, duration, and quality of life. Parents tolerate more seizures if it enables normal social activity."

"Patients are never well-controlled on one drug. After a month or two establishing efficacy, dosing, and comfort, we always add at least a second."

"ASMs are notorious for side effects, which is a big reason we switch drugs so frequently."

Our Goal: Transform the Treatment of Dravet Syndrome by Targeting the Underlying Cause of the Disease, Not Just the Seizures

Multiple medicines available for

Seizure management

No medicines available for

Syndrome management

Available medicines used to control seizures:

- Acetazolamide
- Benzodiazepines
- Brivaracetam
- Cannabidiol
- Carbamazepine
- Clobazam
- Ethosuximide
- Felbamate
- Fenfluramine
- Lamotrigine
- Levetiracetam
- Mesuximide
- Oxcarbazepine
- Phenytoin
- Rufinamide
- Stiripentol
- Topiramate
- Valproate products
- Zonisamide

Despite these treatments, seizures are not adequately controlled in 90% of patients

STK-001

The only potential disease-modifying approach currently in the clinic

Dravet Syndrome is More Than “Just Seizures”

Intellectual Disability & Developmental Delays

*“Over time, we have seen **slow, steady decline** in all areas, from speech, to mobility, endurance, loss of energy, tolerance for stimulation, stamina, etc.”*

Movement & Balance

*“We're disappointed when [our son’s] physical activity is limited and the short walk or visit that we plan with his grandmothers must now be changed to a longer **wheelchair ride**.”*

Language & Speech Disturbances

*“At age 19, [our son] stopped talking, seemingly **losing his capacity for speech** overnight. Most days he is silent, and though he can understand simple conversation he is largely **unable to express himself**.”*

Sleep Abnormalities

*“Every single night, he has **seizures in his sleep**. In addition to all of the other comorbidities of DS, he's **robbed of the basic human necessity** of getting a good night's sleep. This impacts our entire family, as it is hard to function on **so little sleep day after day**."*

Source: Voice of the Patient Report Published by the Dravet Syndrome Foundation, May 2022

Non-Seizure Comorbidities of DS are Progressive and Measurable

Gap in overall intellectual development and adaptive function between patients and neurotypical children appears to widen with age

BUTTERFLY

An observational study of Dravet Syndrome patients

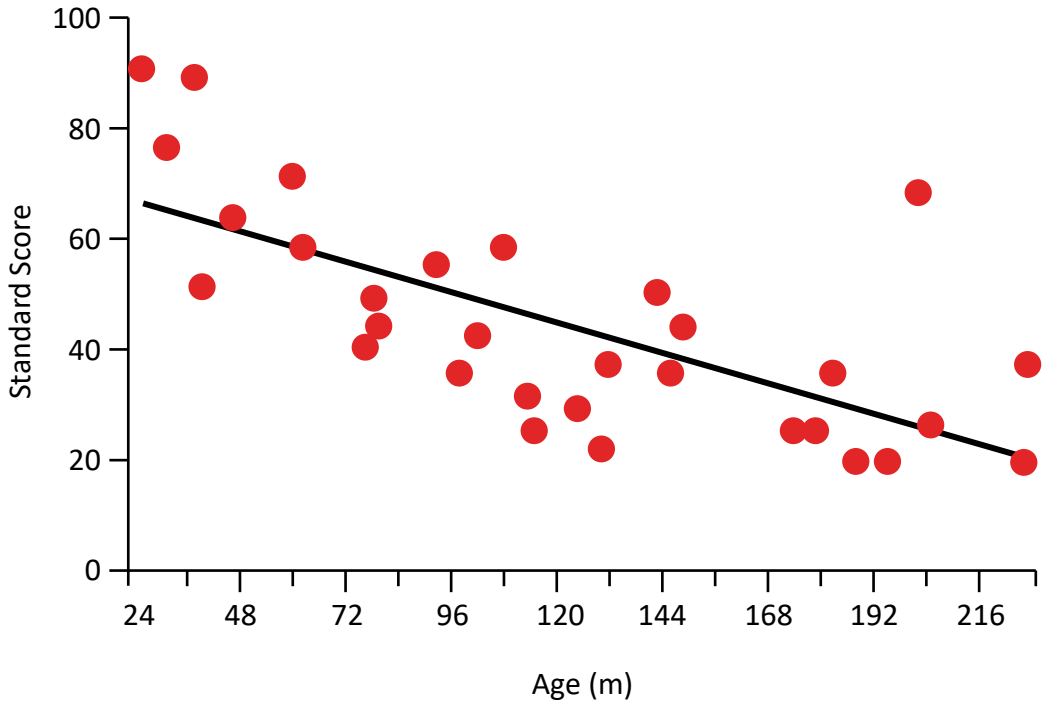
Initial findings showed:

- Validation of standard cognitive measures for use in DS patients
- Substantially decreased neurocognitive abilities despite the use of multiple anti-seizure medications
- A gap in adaptive functioning was observed in VABS* testing

(n=36, 2-18 year-olds). Study ongoing.

Results from the VABS Assessment

Adaptive Behavior Composite (ABC)*

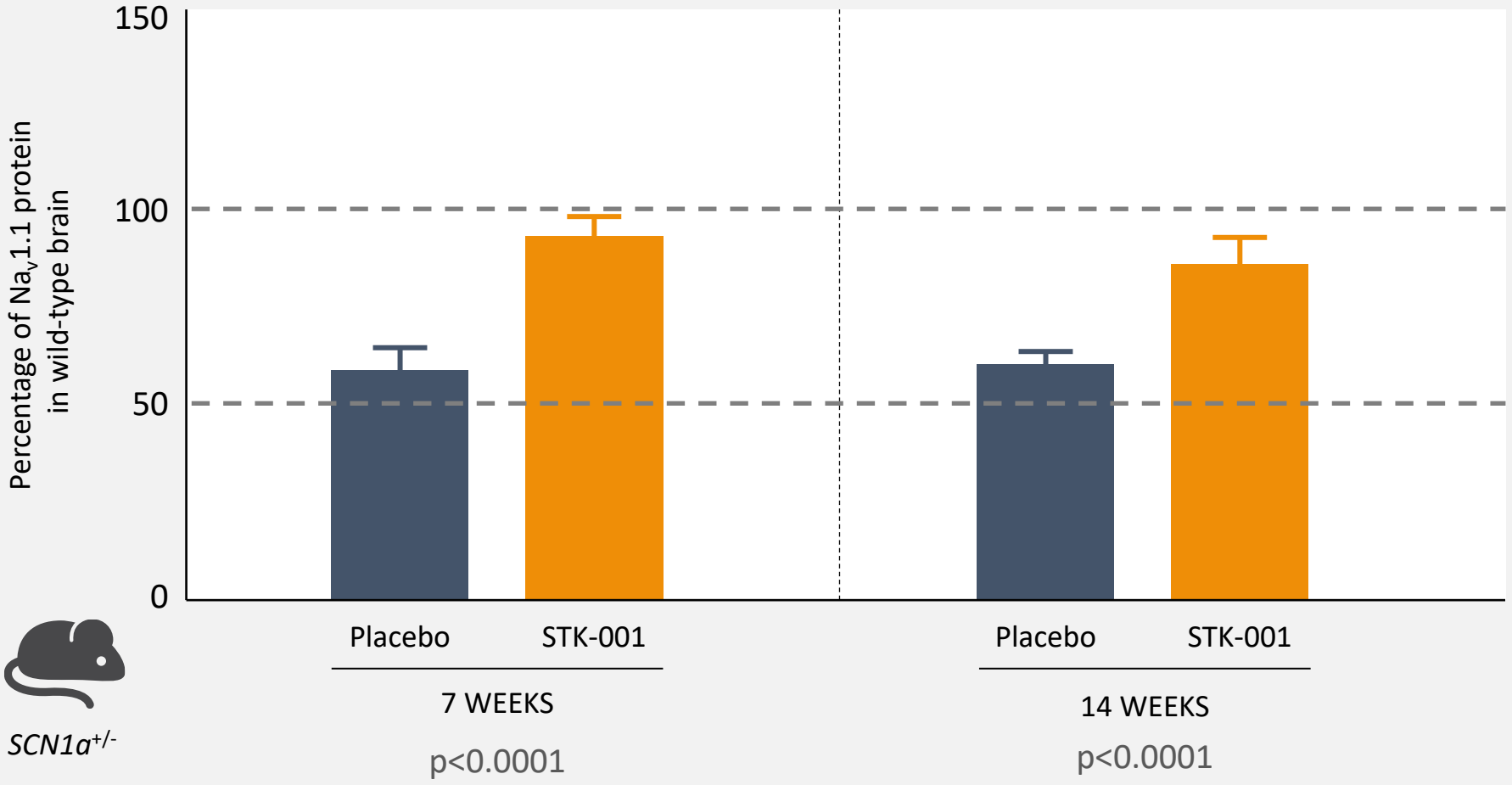


* VABS = Vineland Adaptive Behavior Scales

* ABC score based on Communication, Daily Living, and Socialization domains and expressed relative to normative mean of 100

Source: BUTTERFLY: An Observational Study to Investigate Cognition and Other Non-seizure Comorbidities in Children and Adolescents with Dravet Syndrome (DS) (AES 2021).

STK-001 Restores $Na_V1.1$ to Near Normal Levels for >3 Months in Dravet Syndrome (DS) Mice after a Single Dose

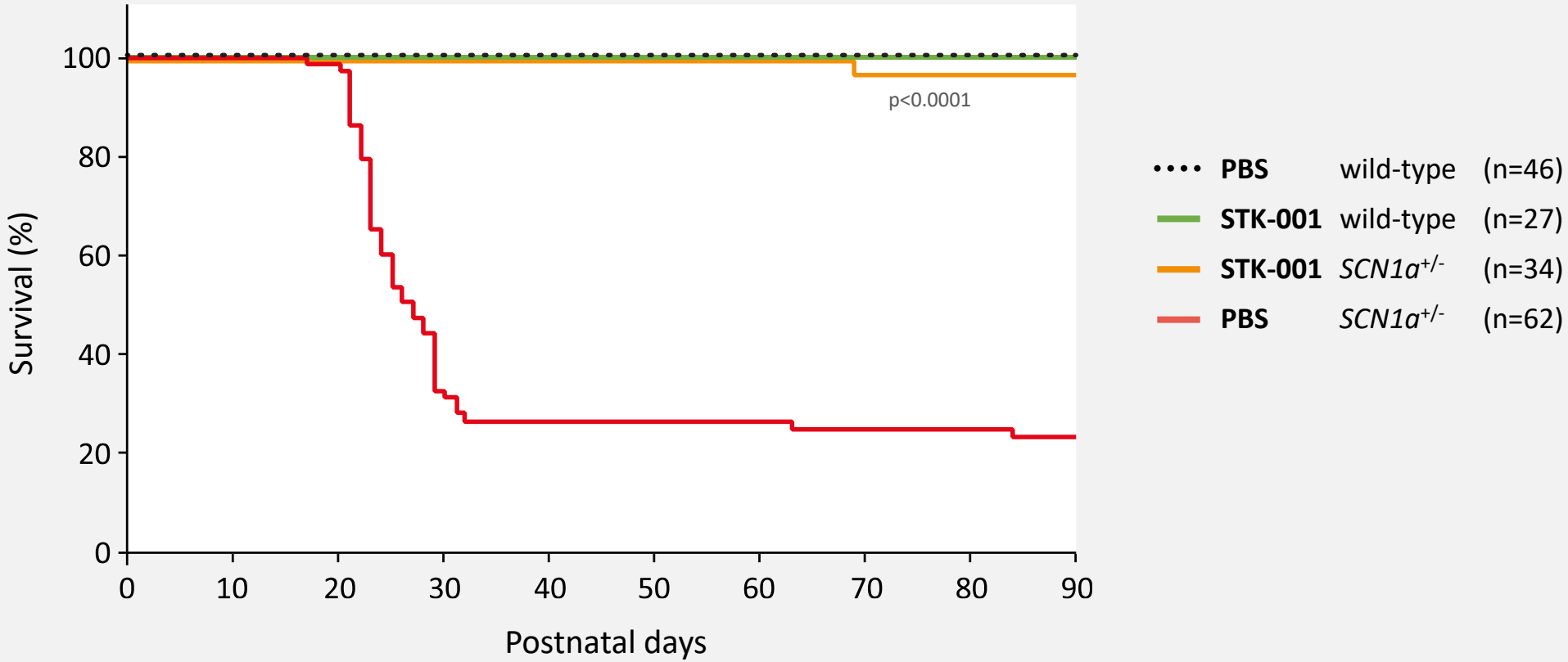


Science Translational Medicine
AAAS

Sources: Z. Han, C. Chen, A. Christiansen, S. Ji, Q. Lin, C. Anumonwo, C. Liu, S. C. Leiser, I. Aznarez, G. Liau, L. L. Isom, Antisense oligonucleotides increase Scn1a expression and reduce seizures and SUDEP incidence in a mouse model of Dravet syndrome. *Sci. Transl. Med.* 12, eaaz6100 (2020).

STK-001 Significantly Reduces Premature Mortality in DS Mice After a Single Dose

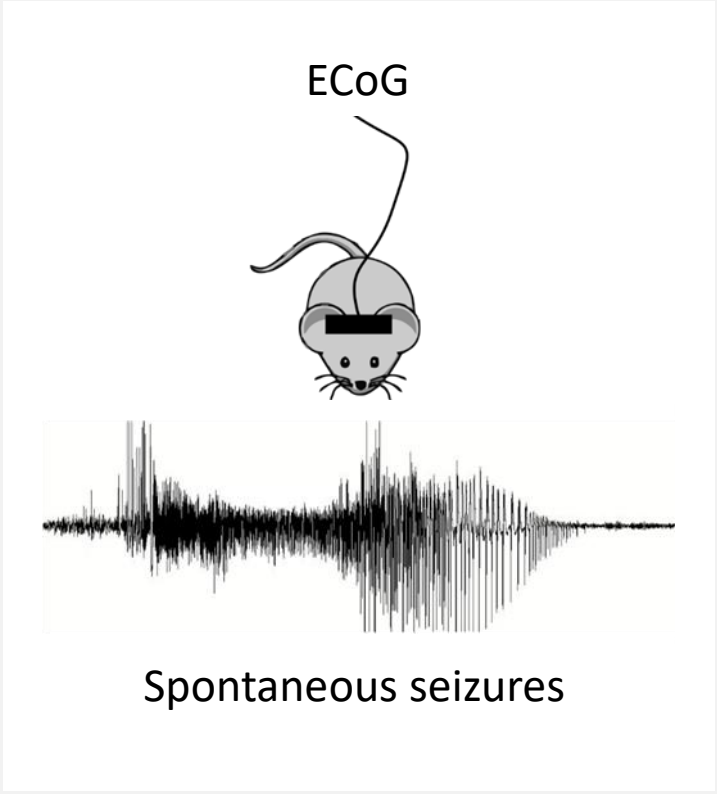
Significant improvements in survival after STK-001 administration at postnatal day 2



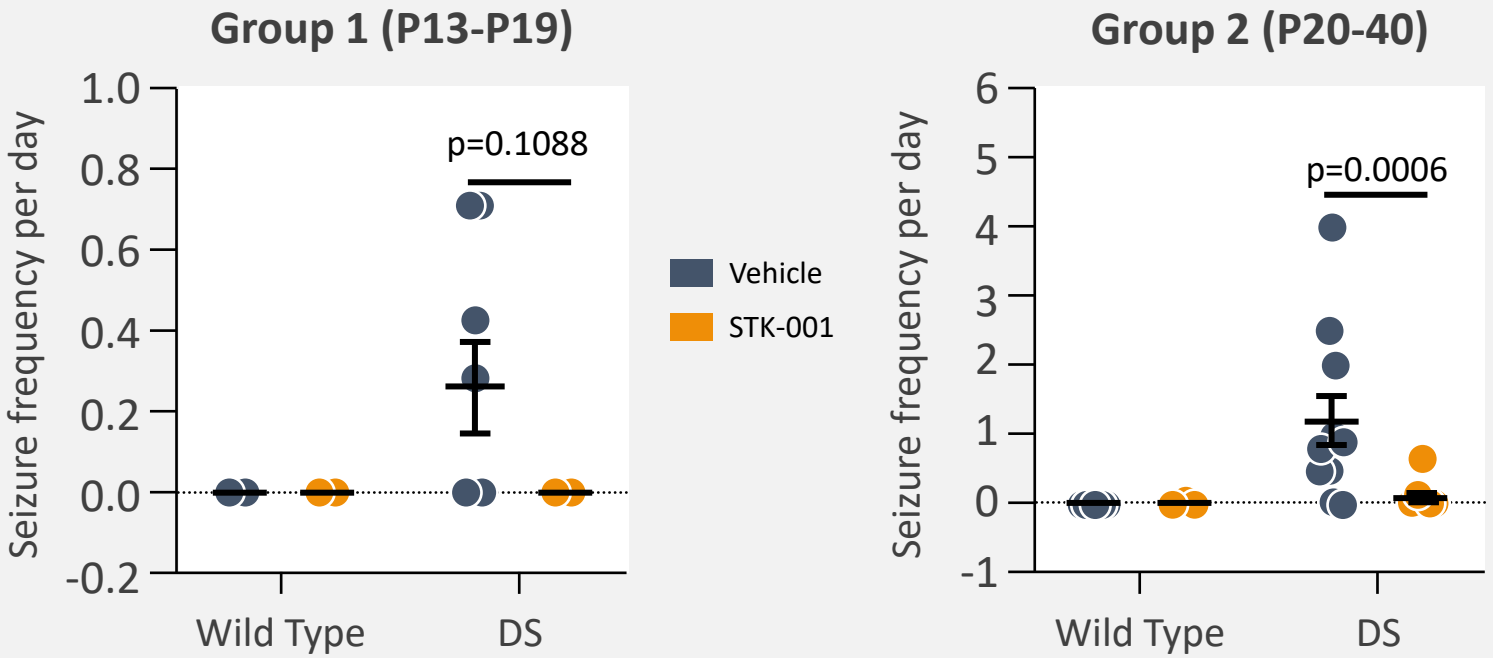
Science Translational Medicine AAAS

Sources: Z. Han, C. Chen, A. Christiansen, S. Ji, Q. Lin, C. Anumonwo, C. Liu, S. C. Leiser, I. Aznarez, G. Liau, L. L. Isom, Antisense oligonucleotides increase Scn1a expression and reduce seizures and SUDEP incidence in a mouse model of Dravet syndrome. *Sci. Transl. Med.* 12, eaaz6100 (2020).

STK-001 Administration Reduces Seizure Frequency in DS Mice



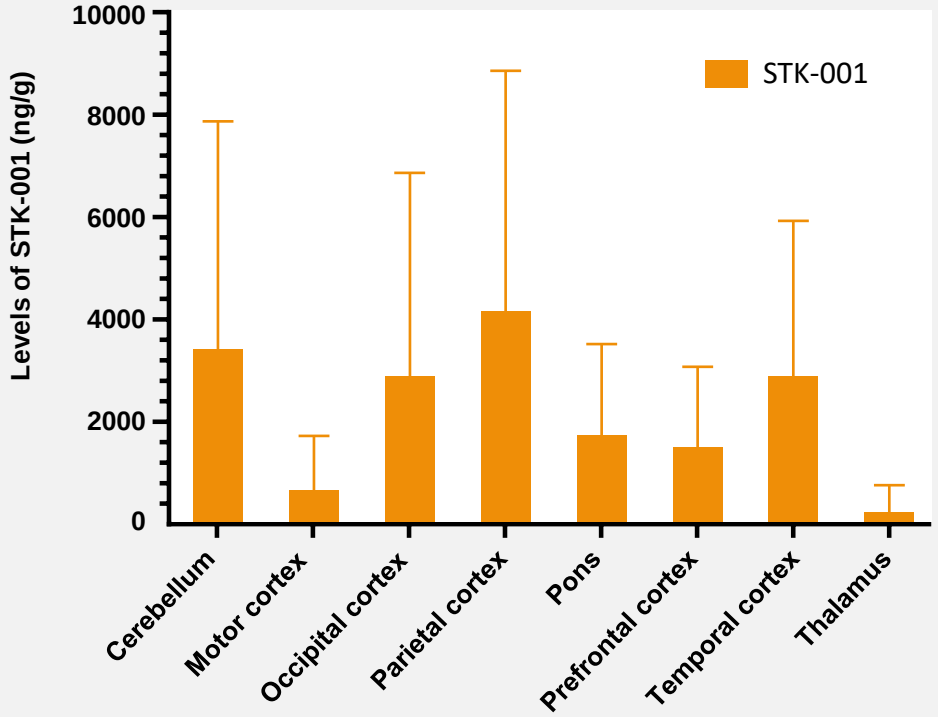
A single dose of STK-001 completely stopped seizure events early (P13-19) and substantially reduced seizure frequency late (P20-40)



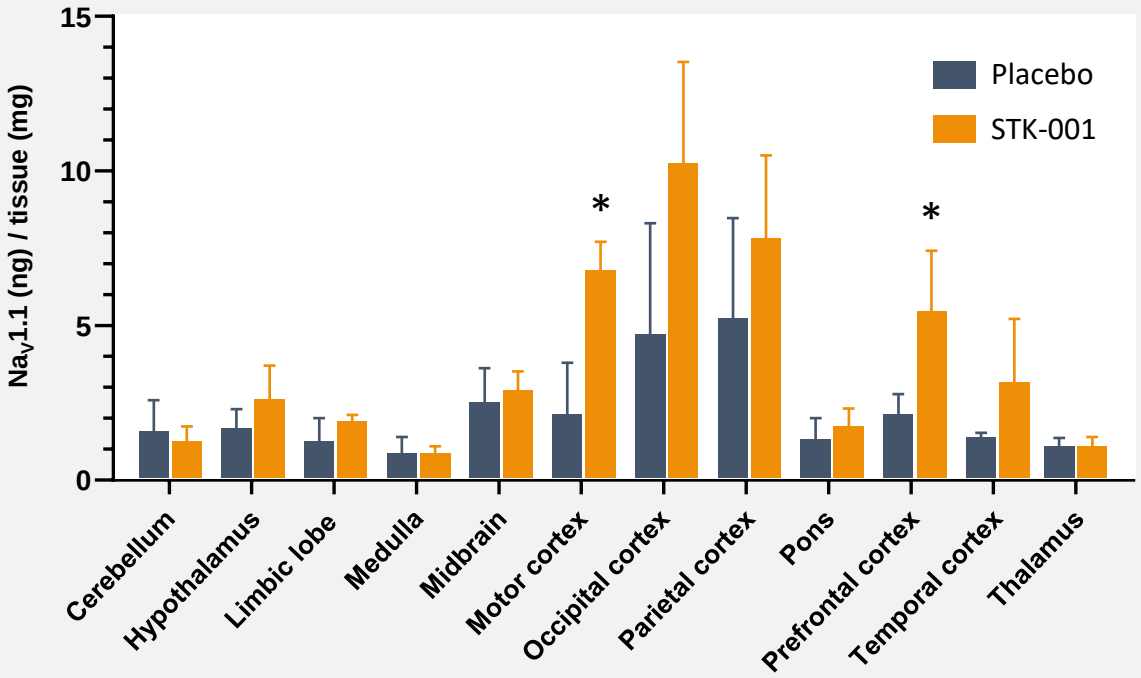
Sources: Targeted Augmentation of Nuclear Gene Output (TANGO) of SCN1A reduces seizures and rescues parvalbumin positive interneuron firing frequency in a mouse model of Dravet syndrome (AES 2020). Wengert ER, Wagley PK, Strohm SM, Reza N, Wenker IC, Gaykema RP, Christiansen A, Liau G, Patel MK. Targeted Augmentation of Nuclear Gene Output (TANGO) of Scn1a rescues parvalbumin interneuron excitability and reduces seizures in a mouse model of Dravet Syndrome. Brain Res. 2022;1775:147743.

STK-001 Achieves Broad Distribution and Increases $Na_v1.1$ Protein Expression in NHPs

Study 1: Exposure of STK-001 observed in all brain regions



Study 2: $Na_v1.1$ protein levels increased up to 3-fold



* = p<0.05

NHP = Non-human primate
Source (left graph): Stoke data
Source (right graph) TANGO oligonucleotides for the treatment of Dravet Syndrome: Safety, biodistribution and pharmacology in the non-human primate (AES 2019)

Preclinical Findings Support Clinical Development of STK-001

- Single dose restores $Na_V1.1$ to near-normal levels for >3 months in DS mice
- Significantly reduces mortality and seizure frequency in DS mice
- Achieves broad distribution and increases $Na_V1.1$ protein expression in NHPs
- NHP toxicology studies support current clinical dosing

Sources: Targeted Augmentation of Nuclear Gene Output (TANGO) of SCN1A reduces seizures and rescues parvalbumin positive interneuron firing frequency in a mouse model of Dravet syndrome (AES 2020). Wengert ER, Wagley PK, Strohm SM, Reza N, Wenker IC, Gaykema RP, Christiansen A, Liau G, Patel MK. Targeted Augmentation of Nuclear Gene Output (TANGO) of Scn1a rescues parvalbumin interneuron excitability and reduces seizures in a mouse model of Dravet Syndrome. Brain Res. 2022;1775:147743. Stoke data. TANGO oligonucleotides for the treatment of Dravet Syndrome: Safety, biodistribution and pharmacology in the non-human primate (AES 2019)

Phase 1/2a Trials of STK-001 for Dravet Syndrome are Ongoing

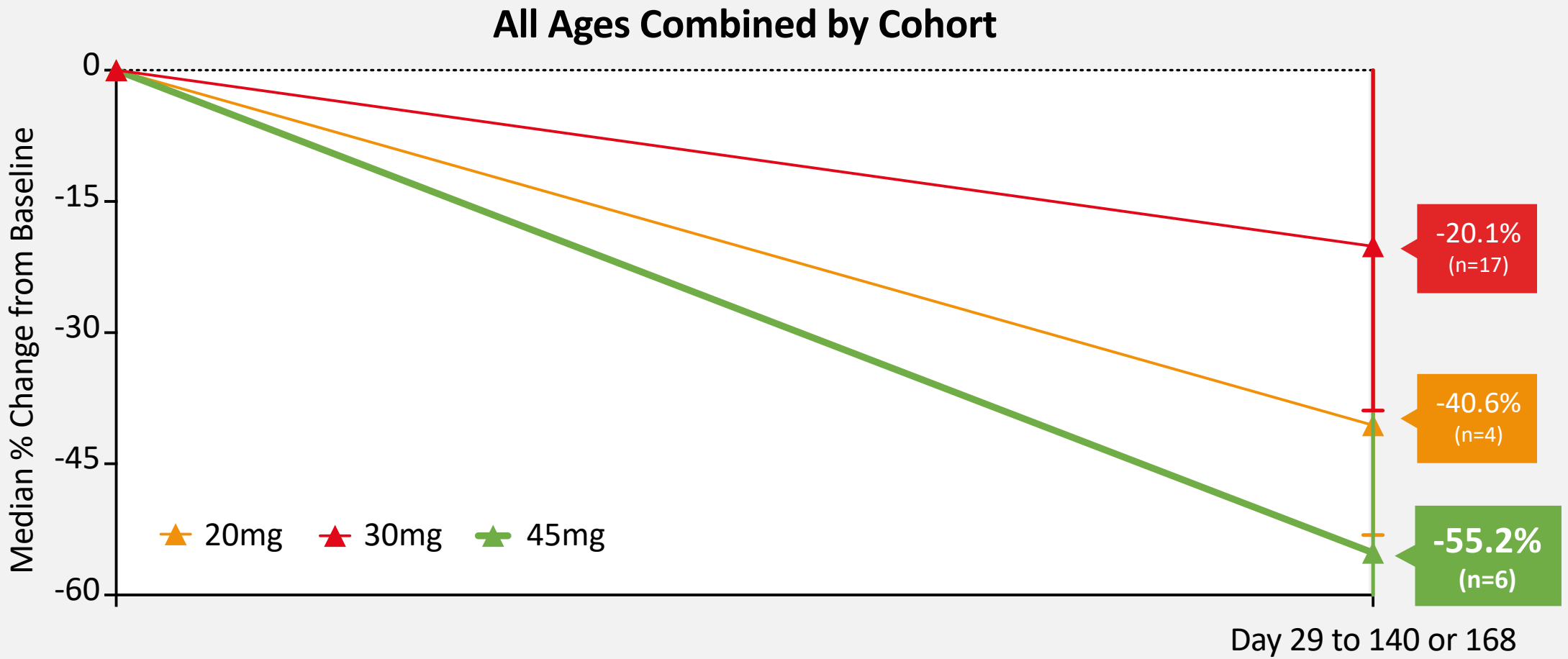
Parallel studies in the US & UK evaluating children and adolescents ages 2 to 18 years old

	monarch	admiral
Design	Evaluation of STK-001 (up to 70mg*)	Evaluation of STK-001 (up to 70mg)
Status	SAD @70mg: Enrollment underway MAD @45mg: Dosing complete	MAD @70mg: Dosing ongoing
Primary Endpoint	Safety and tolerability of SAD and MAD dose levels	Safety and tolerability of MAD dose levels
	Characterize human pharmacokinetics (PK) and cerebrospinal fluid (CSF) drug exposure	
Secondary Endpoint	Change in seizure frequency, overall clinical status, and quality of life	
Open-Label Extension	Enrollment and dosing ongoing (30mg) swallowtail	Enrollment and dosing ongoing (45mg) Longwing

*Multiple doses >45mg and single doses >70mg remain on FDA partial clinical hold

Sources: MONARCH and ADMIRAL Interim Analyses: Phase 1/2a Studies Investigating Safety and Drug Exposure of STK-001, an Antisense Oligonucleotide (ASO), in Children and Adolescents with Dravet Syndrome (DS) (AES 2022).

Reductions in Convulsive Seizure Frequency Observed in Patients Treated With STK-001 On Top of Multiple Anti-Seizure Medicines

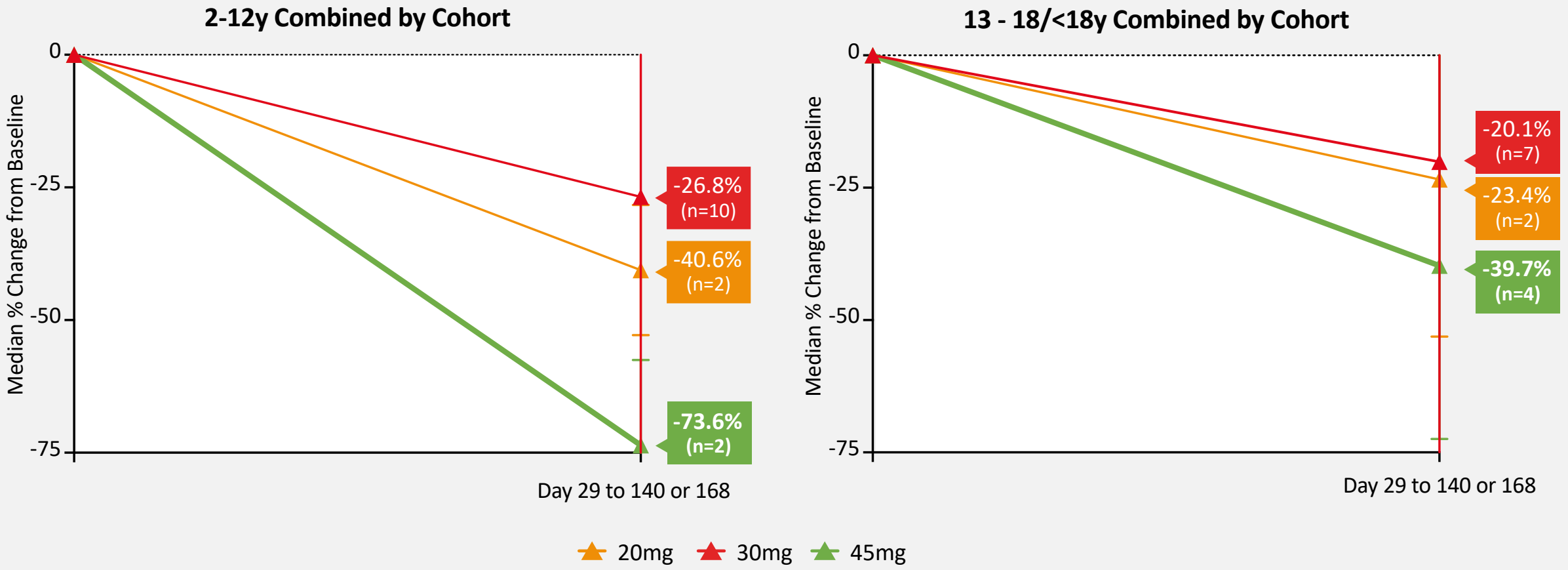


>50% of patients were taking concomitant fenfluramine

Source: MONARCH and ADMIRAL Interim Analyses: Phase 1/2a Studies Investigating Safety and Drug Exposure of STK-001, an Antisense Oligonucleotide (ASO), in Children and Adolescents with Dravet Syndrome (DS) (AES 2022).

Reductions in Convulsive Seizure Frequency Observed Across Age Groups Taking Multiple Doses of STK-001

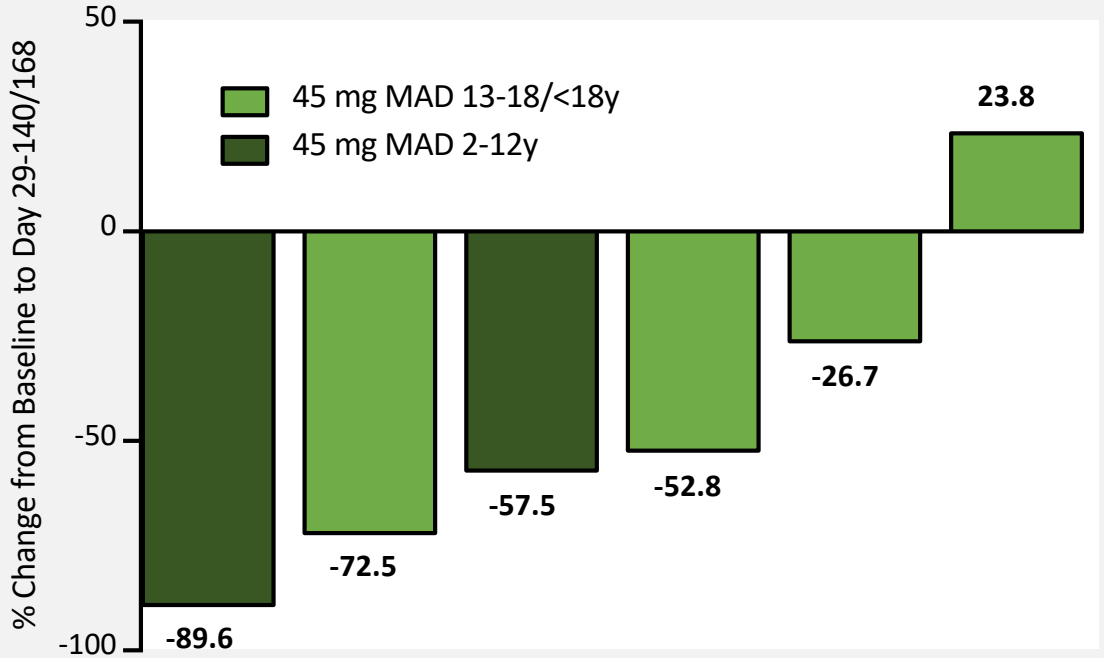
74% Median seizure reduction observed in younger patients



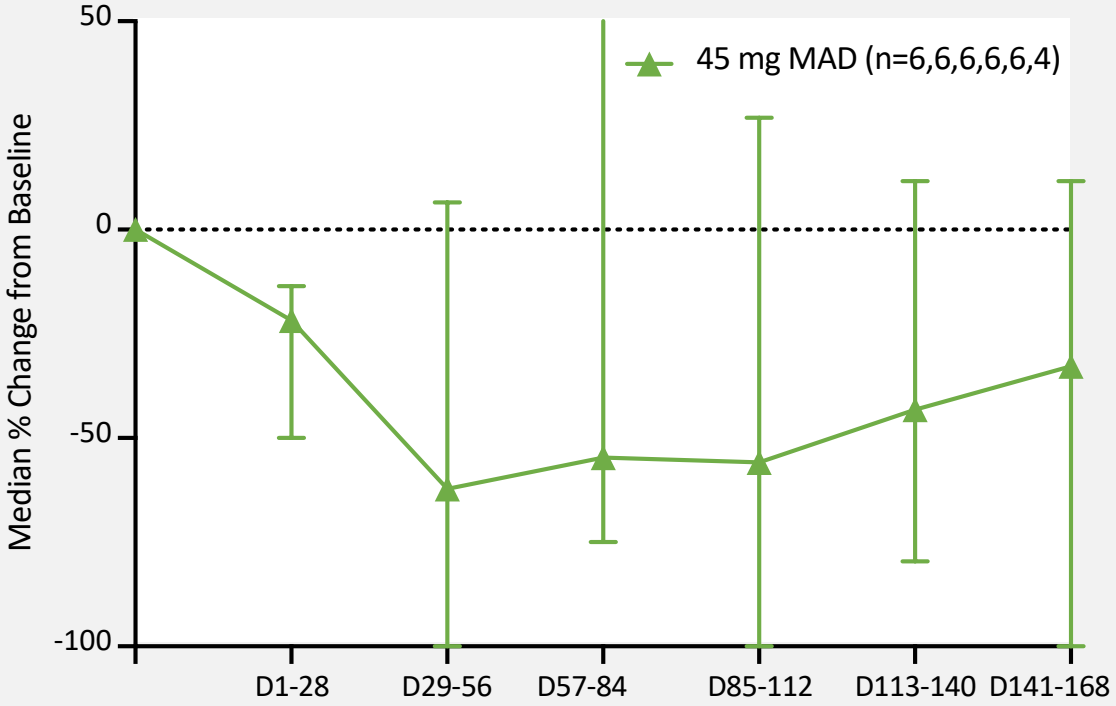
Source: MONARCH and ADMIRAL Interim Analyses: Phase 1/2a Studies Investigating Safety and Drug Exposure of STK-001, an Antisense Oligonucleotide (ASO), in Children and Adolescents with Dravet Syndrome (DS) (AES 2022).

67% (4/6) Patients Experienced >50% Reduction in Convulsive Seizure Frequency with Three Doses of STK-001 (45mg)

Reductions began after the first dose and continued with additional treatment



4/6 patients were taking concomitant fenfluramine

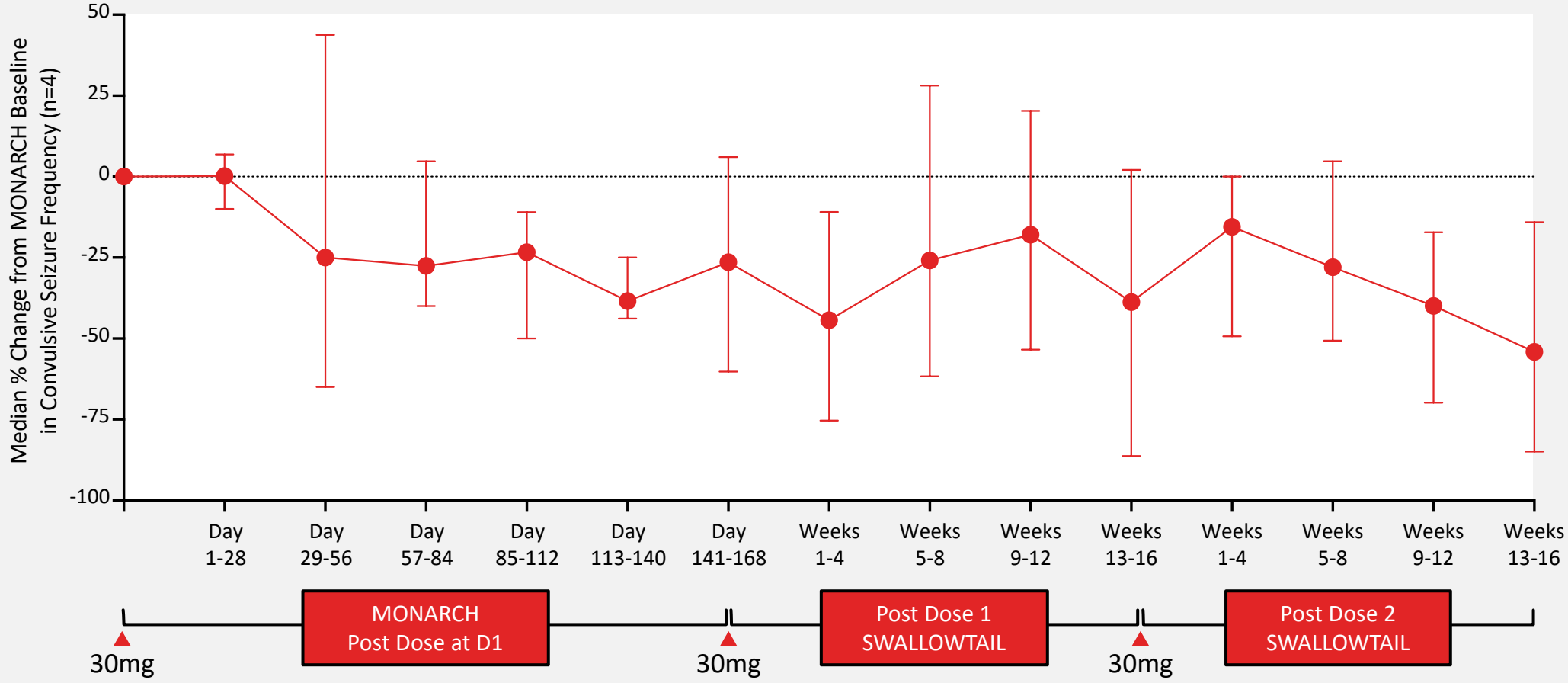


Convulsive Seizure Frequency All Ages

Source: MONARCH and ADMIRAL Interim Analyses: Phase 1/2a Studies Investigating Safety and Drug Exposure of STK-001, an Antisense Oligonucleotide (ASO), in Children and Adolescents with Dravet Syndrome (DS) (AES 2022).

Reductions in Seizure Frequency Were Maintained with Ongoing STK-001 Treatment

Convulsive Seizure Frequency

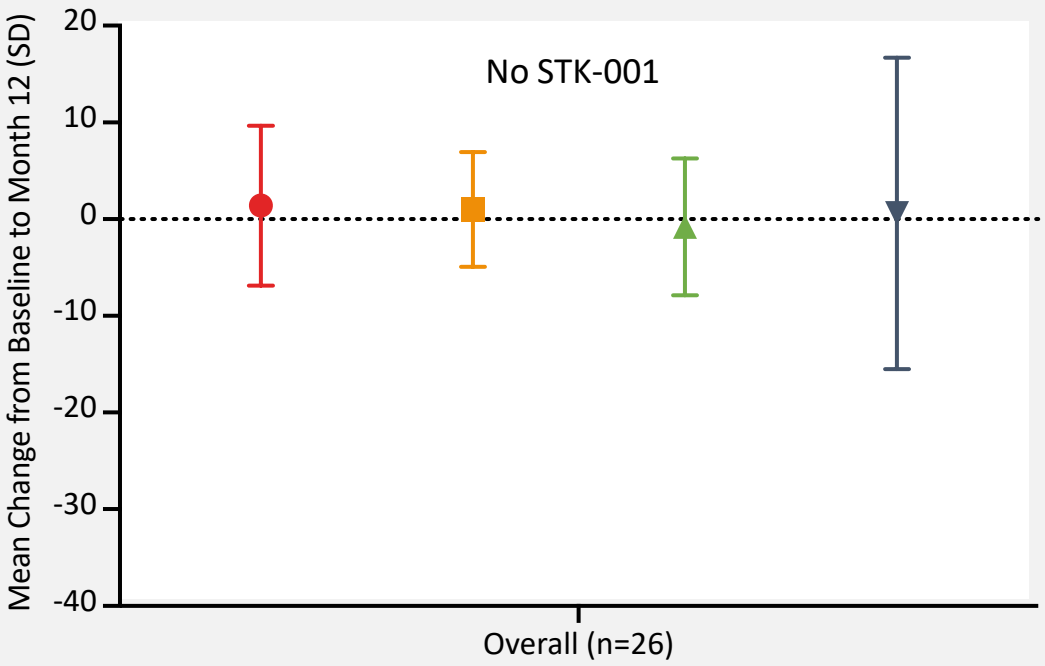


No exclusions for AED modification

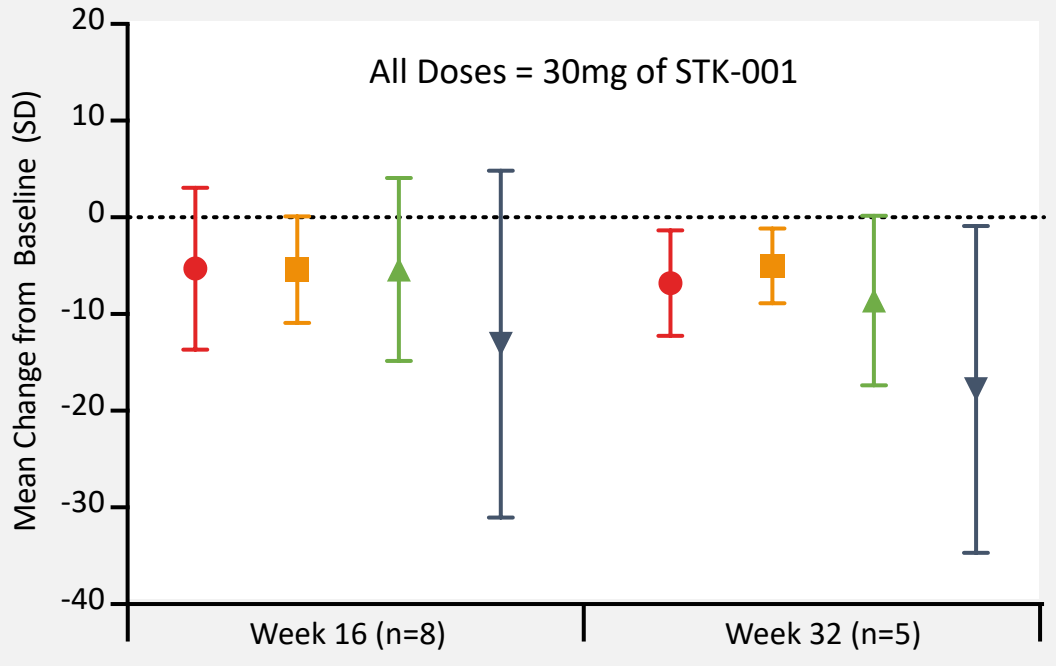
Source: SWALLOWTAIL: An Open-Label Extension (OLE) Study for Children and Adolescents with Dravet Syndrome (DS) who Previously Participated in a Study of Antisense Oligonucleotide (ASO) STK-001 (AES 2022).

Improvements in Non-Seizure Comorbidities Measured by the BRIEF-P Indicate the Potential for Disease Modification

BUTTERFLY
An observational study of Dravet Syndrome patients



swallowtail
A DRAVET SYNDROME EXTENSION STUDY



ISCI (Inhibit + Emotional Control) FI (Shift + Emotional Control) EMI (Working Memory + Plan/Organize) Global Executive Composite

As measured by Behavior Rating Inventory of Executive Function–Preschool Version, an assessment of pediatric executive function.

Sources: Twelve-month Analysis of BUTTERFLY: An Observational Study to Investigate Cognition and Other Non-seizure Comorbidities in Children and Adolescents with Dravet Syndrome (DS) (AES 2022). SWALLOWTAIL: An Open-Label Extension (OLE) Study for Children and Adolescents with Dravet Syndrome (DS) who Previously Participated in a Study of Antisense Oligonucleotide (ASO) STK-001 (AES 2022).

STK-001 Has Potential to Address the Genetic Cause of Dravet Syndrome

Summary of Key Ph1/2a Interim Data

- ✓ Single and multiple doses of STK-001 up to 45mg were well-tolerated
- ✓ 55% median reduction in convulsive seizure frequency observed in patients treated with three doses of STK-001 (45mg)
- ✓ Reductions in seizure frequency were maintained with ongoing treatment
- ✓ Early indication of improvements in non-seizure comorbidities as measured by BRIEF-P*

*Behavior Rating Inventory of Executive Function–Preschool Version, an assessment of pediatric executive function

Sources: MONARCH and ADMIRAL Interim Analyses: Phase 1/2a Studies Investigating Safety and Drug Exposure of STK-001, an Antisense Oligonucleotide (ASO), in Children and Adolescents with Dravet Syndrome (DS) (AES 2022). SWALLOWTAIL: An Open-Label Extension (OLE) Study for Children and Adolescents with Dravet Syndrome (DS) who Previously Participated in a Study of Antisense Oligonucleotide (ASO) STK-001 (AES 2022).

Autosomal Dominant Optic Atrophy (ADOA): A Severe, Progressive Optic Nerve Disorder

65-90%

of cases caused by mutations in one allele of the *OPA1* gene, most of which lead to a **HAPLOINSUFFICIENCY**

RESULTING in

50%

OPA1 protein expression and disease manifestation

1 out of 30,000

people are affected globally with a higher incidence of ~1 out of 10,000 in Denmark due to a founder effect

>400

Different *OPA1* mutations reported in ADOA patients

Up to 46%

of patients are registered legally blind

80%

of patients are symptomatic by age 10

~18,000

people affected in the U.S., Canada, Japan, Germany, France and the UK

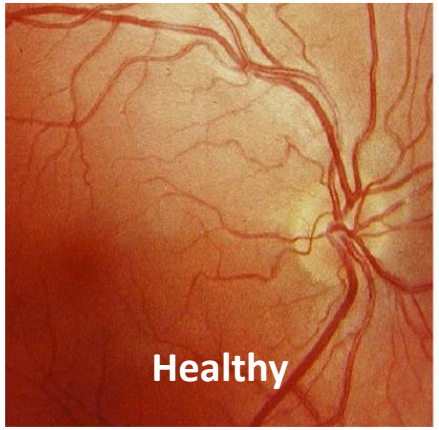
Sources: Yu-Wai-Man P et al. *Ophthalmology*, 2010; Yu-Wai-Man P, Chinnery PF. *Ophthalmology*, 2013; P. Amati-Bonneau P et al. *The International Journal of Biochemistry & Cell Biology*, 2009; Lenaers G, Hamel C, Delettre C, et al. *Orphanet J Rare Dis*, 2012; Chun BY and Rizzo JF III. *Curr Opin Ophthalmol*, 2016; Le Roux B, Lenaers G, Zanlonghi X et al. *Orphanet J Rare Dis*, 2019; "What is ADOA?" Autosomal Dominant Optic Atrophy Association. Accessed May 6, 2020, from https://www.adoaa.org/what-is-adoa;

No Approved Disease-Modifying Therapies for ADOA

Healthy Vision

Simulation of Optic Neuropathy

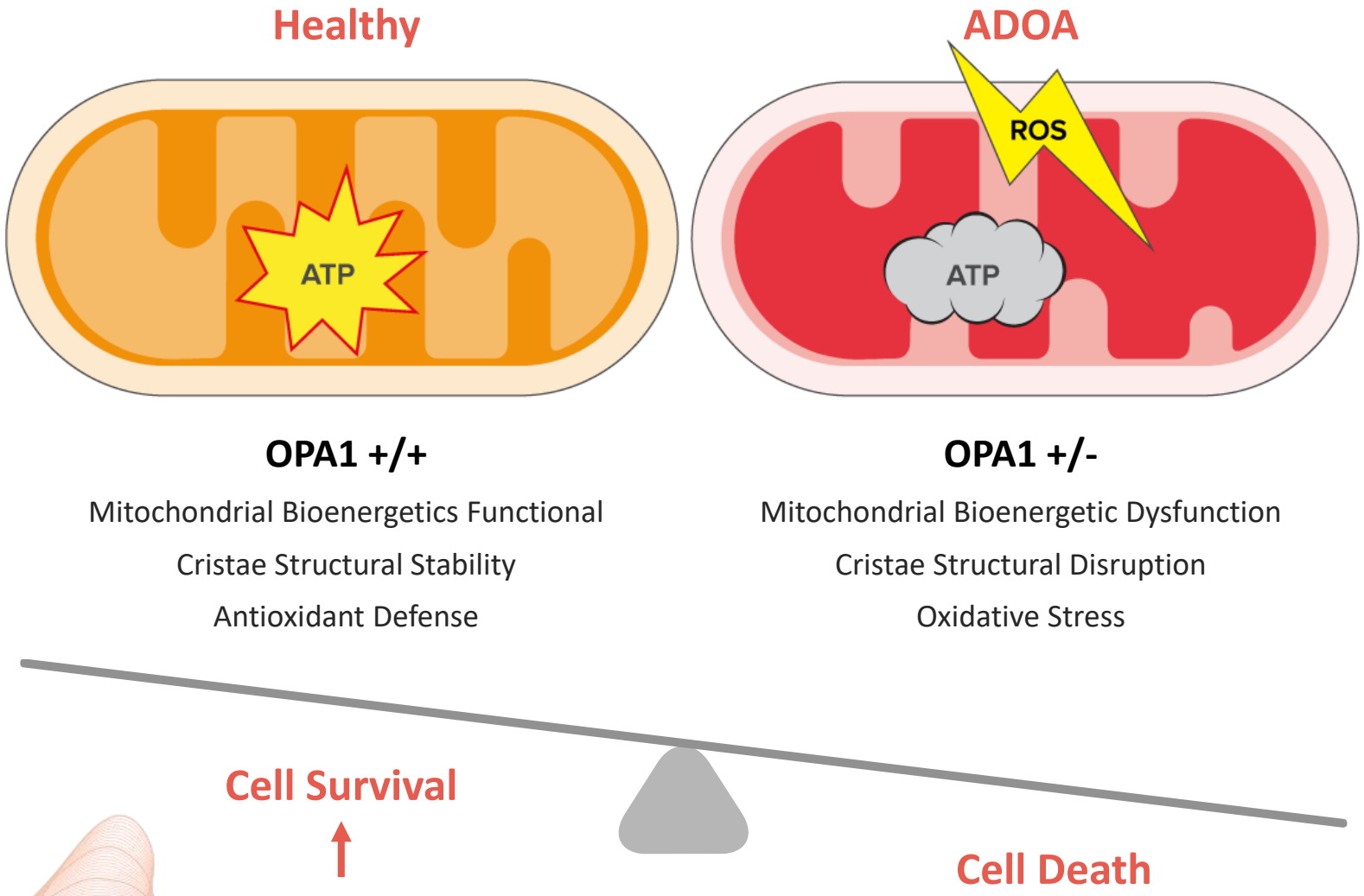
- Most common inherited optic nerve disorder
- Leads to central field defects and reduced color vision in both eyes
- Severity can vary; rate of vision loss difficult to predict
- Supportive services and low-vision aids are offered for patients



Sources: Yu-Wai-Man P et al. *Ophthalmology*, 2010; Yu-Wai-Man P, Chinnery PF. *Ophthalmology*, 2013;
Lenaers G, Hamel C, Delettre C, et al. *Orphanet J Rare Dis*, 2012; Chun BY and Rizzo JF III. *Curr Opin Ophthalmol,* 2016
Image of child sourced from ICR, Ophthalmology Center Barcelona. Accessed Jan. 8, 2021 from https://icrcat.com/en/eye-conditions/leber-hereditary-optic-neuropathy/
Credit: Lhon Eye Society Sweden. Image shown depicts Leber Hereditary Optic Neuropathy, which presents visual effects similar to ADOA.

OPA1 is Critical for Normal Mitochondrial Function and Cellular Metabolism

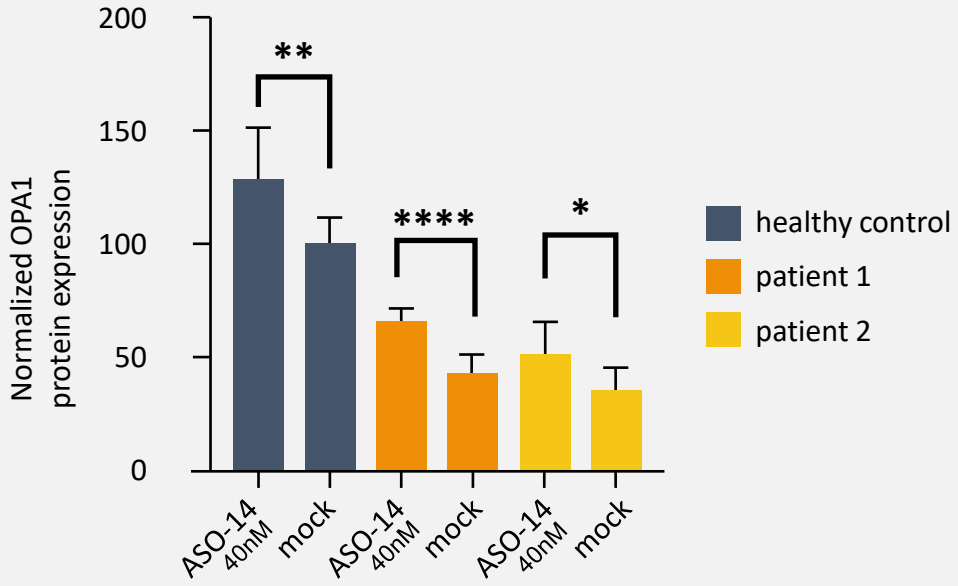
- Retinal ganglion cells have very high energy (ATP) requirements
- Impaired mitochondrial function leads to cell death
- OPA1 is critical for mitochondrial function and energy production



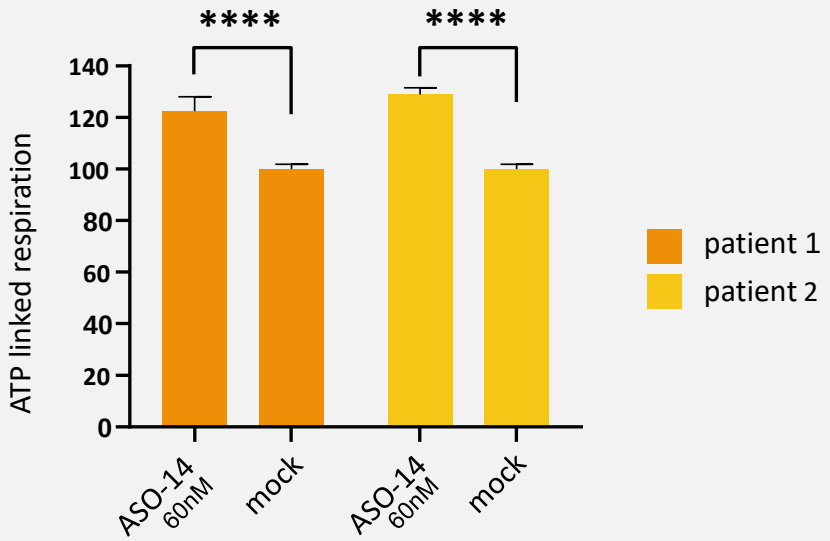
* ROS = Reactive Oxygen Species

TANGO ASO Increases OPA1 Protein and ATP Linked Mitochondrial Respiration in ADOA Patient Cells

ASO treatment increased OPA1 protein levels in OPA1 deficient ADOA patient cells



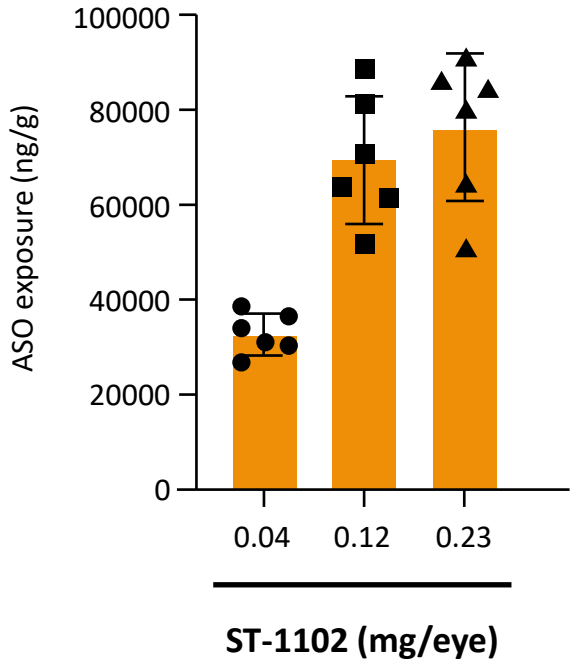
ASO treatment increased ATP linked respiration in OPA1 deficient ADOA patient cells



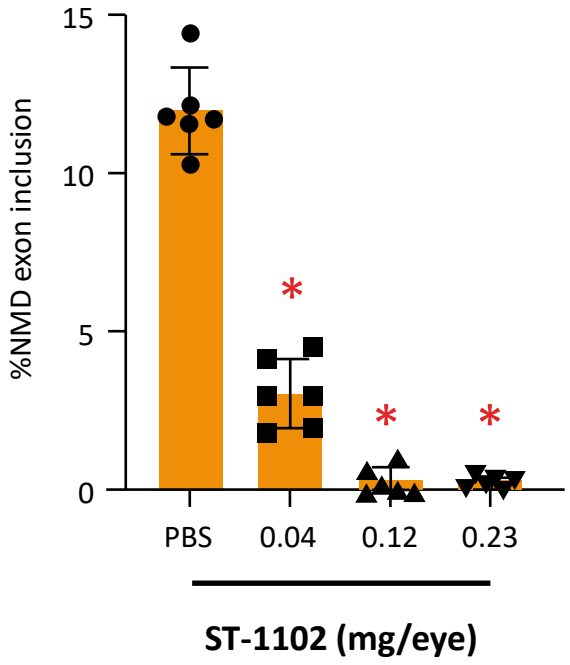
Source (left graph): Stoke data
Source (right graph): Venkatesh A, et al. Antisense oligonucleotide mediated increase in OPA1 improves mitochondrial function in fibroblasts derived from patients with autosomal dominant optic atrophy (ADOA). Presented at The Association for Research in Vision and Ophthalmology; May 1-7, 2021.

TANGO ASO Demonstrates Dose-Dependent OPA1 Protein Increases in Rabbit Retina

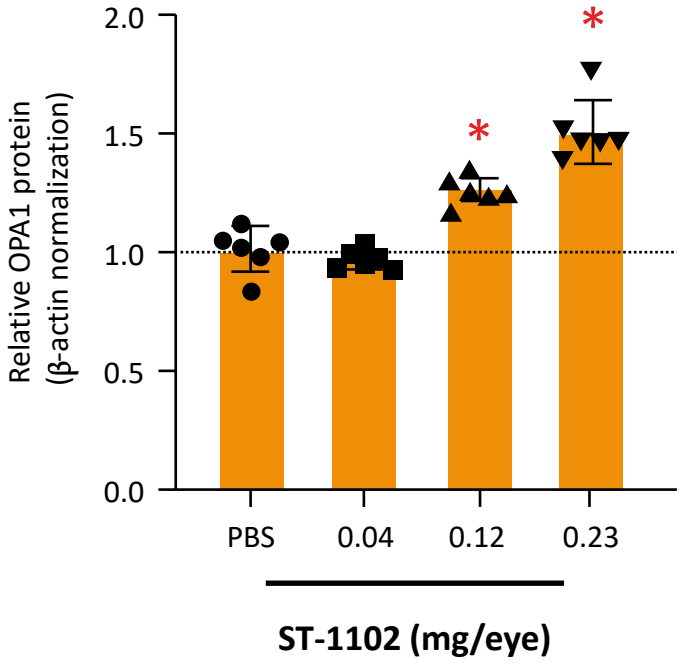
ASO exposure in retina Day 29



Target engagement Day 29



OPA1 protein Day 29

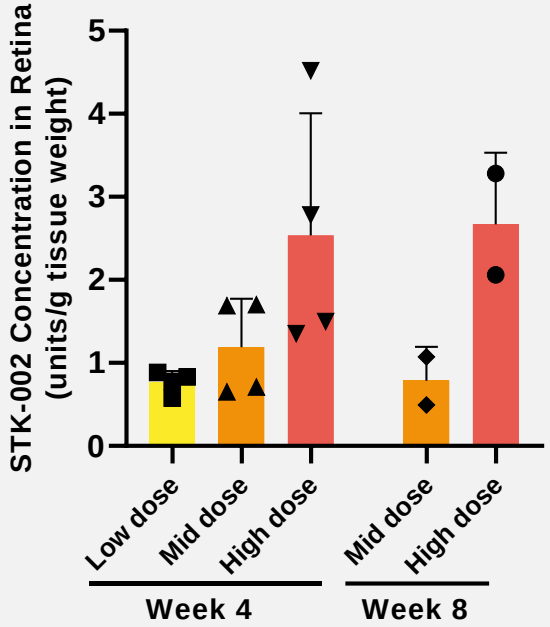


***P*<0.0005 by one-way ANOVA compared to PBS group**

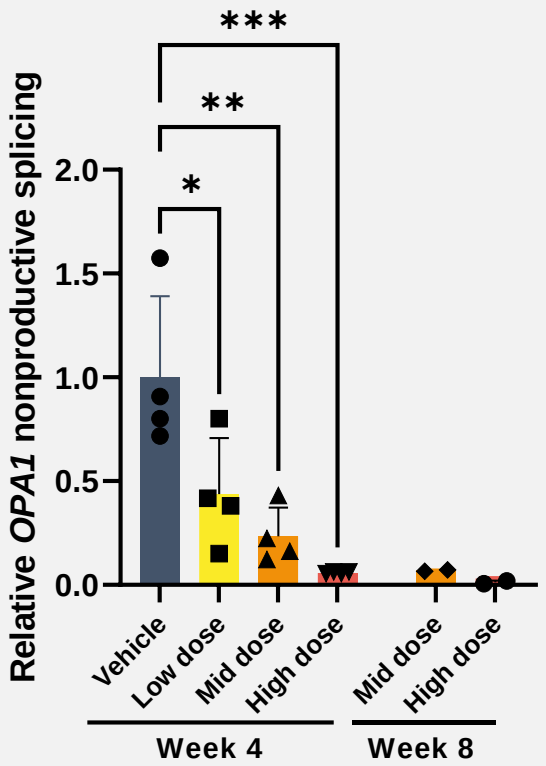
Source: Steven Gross, et al. A Prospective Natural History Study of Patients with Autosomal Dominant Optic Atrophy (ADOA) – FALCON. Presented at The North American Neuro-Ophthalmology Society; February 12-17, 2022; Austin, TX.

Dose-Related Target Engagement and OPA1 Protein Upregulation in Retinal Tissue of NHPs following IVT Administration of STK-002

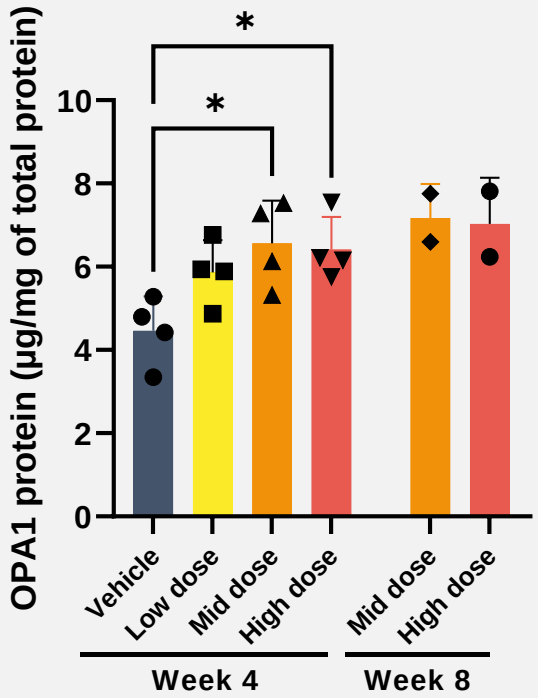
STK-002 exposure



Target engagement



OPA1 protein



NHP: Non-human primates
IVT: Intravitreal
Source: Venkatesh A, et al. STK-002, an Antisense Oligonucleotide (ASO) for the Treatment of Autosomal Dominant Optic Atrophy (ADOA), is Taken Up by Retinal Ganglion Cells (RGC) and Upregulates OPA-1 Protein Expression After Intravitreal Administration to Non-human Primates (NHPs). ASGCT; May 16-19, 2022.

Preclinical Findings Support Clinical Development of STK-002

Summary of Key Preclinical Data

- Increase OPA1 protein and ATP linked respiration in ADOA patient cells ✓
- Result in dose-dependent increases in OPA1 protein expression in rabbit retina ✓
- Were well tolerated for up to 29 days after intravitreal injection in rabbit ✓
- Dose-related increase in OPA1 protein expression was observed in NHP RGCs ✓

CTA submitted in the UK to enable Phase 1/2 start in 2024

Sources: Venkatesh A, et al. STK-002, an Antisense Oligonucleotide (ASO) for the Treatment of Autosomal Dominant Optic Atrophy (ADOA), is Taken Up by Retinal Ganglion Cells (RGC) and Upregulates OPA-1 Protein Expression After Intravitreal Administration to Non-human Primates (NHPs). ASGCT; May 16-19, 2022.

Our Pipeline of First-in-Class Disease Modifying Potential Medicines

PROGRAM	TARGET	DISCOVERY & PRECLINICAL	PHASE 1/2	PHASE 3	PARTNER
Central Nervous System					
Dravet Syndrome	*SCN1A*		STK-001		100% Stoke Global
SYNGAP1 Syndrome	*SYNGAP1*				Stoke : Acadia 50:50
Rett Syndrome	*MECP2*				Acadia Worldwide License
Undisclosed	*Undisclosed*				Acadia Worldwide License
Ophthalmology					
ADOA	*OPA1*	STK-002			100% Stoke Global

ADOA: Autosomal dominant optic atrophy

Rett Syndrome: A Severe, Debilitating Neurological Disorder

~33%

of cases caused by hypomorphic mutations of the *MECP2* gene[1]

RESULTING in

Partial loss of function of the MeCP2 protein

1 out of **10,000** to **15,000** females are born with Rett syndrome[2]

Period of rapid decline typically begins between

6 to **18**

months[4]

Symptoms include[3]:

- **Loss of purposeful hand use**
- **Involuntary hand movements such as handwringing**
- **Loss of speech**
- **Loss of mobility or gait disturbances**

60-80% of patients have **epilepsy**[4]

Note: All seizure types have been reported in Rett syndrome. Complex partial and generalized tonic-clonic are the most common
Sources: [1] RettBase (http://mecp2.chw.edu.au/); GnomAD (https://gnomad.broadinstitute.org); NOMAD; [2] National Institutes of Health – National Institute of Neurological Disorders and Stroke; [3] International Rett Syndrome Foundation; [4] Operta et al., Brain Behav 2019

SYNGAP1 Syndrome: A Severe Intellectual Disability / Developmental and Epileptic Encephalopathy (ID/DEE)

>80%

of cases caused by a **HAPLOINSUFFICIENCY** of the *SYNGAP1* gene[1]

RESULTING in

50%

SynGAP protein expression

1-2 **out of** **100,000** children are born with SYNGAP1-ID/DEE

1-2%

of all **intellectual disability** cases[2]

84%

of patients have **generalized epilepsy**[3]

100%

of patients have **developmental delay** or **intellectual disability**[3]

~50%

of patients have **autism and other behavioral abnormalities**[3]

Sources: [1] Parker et al., *American Journal of Medical Genetics*, 2015; Jimenez-Gomez et al., Journal of Neurodevelopmental Disorders, 2019; [2] SYNGAP1 Resource Guide, Second Edition; An Overview of SYNGAP1 Basic Biology and Clinical Description. Bridge the Gap SYNGAP (now SYNGAP1 Foundation); SynGAP Research Fund; [3] SYNGAP1-Related Intellectual Disability: https://www.ncbi.nlm.nih.gov/books/NBK537721/#_syngap1-id_Clinical_Characteristics_

2023 Priorities

Advance STK-001 for Dravet Syndrome to Pivotal

- 45mg clinical data anticipated in mid-2023
- 70mg clinical data anticipated in second half of 2023
- Complete Phase 1/2a in 2023 to enable a Phase 3 program in 2024

Advance STK-002 for ADOA

- Submit CTA in the UK in the first half of 2023 to enable Phase 1/2 start in 2024

Develop & Expand Pipeline

- Expand TANGO ASOs as a first-in-class disease-modifying approach for additional genetic diseases
- Execute on collaboration with Acadia to advance Rett syndrome and Syngap1 syndrome programs

ADOA: Autosomal dominant optic atrophy

Current Liquidity* Anticipated to Fund Operations to the End of 2025

$230.2M

Cash, Cash Equivalents, Marketable Securities, and Restricted Cash

as of 12/31/2022

39.4M

Common Shares Outstanding

as of 12/31/2022

*Including $44.7 million in proceeds from our Controlled Equity Offering Sales Agreement since December 31, 2022

STOKE THERAPEUTICS