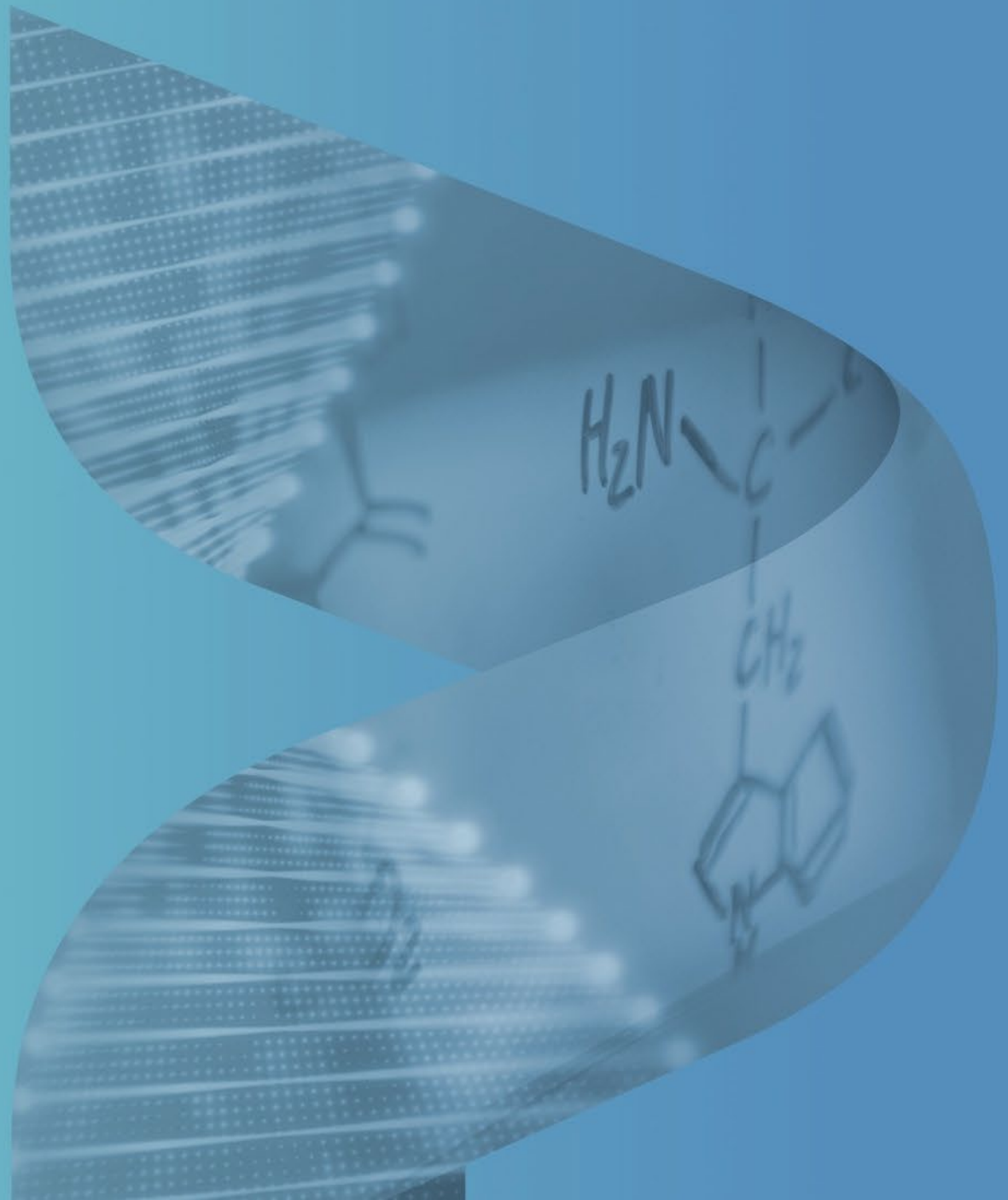
PepGen™

Empowering Oligonucleotide Therapeutics

Company Presentation

January 2024



Disclaimers

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. These statements may be identified by words such as “aims,” “anticipates,” “believes,” “could,” “estimates,” “expects,” “forecasts,” “goal,” “intends,” “may,” “plans,” “possible,” “potential,” “seeks,” “will,” and variations of these words or similar expressions that are intended to identify forward-looking statements. Any such statements in this press release that are not statements of historical fact may be deemed to be forward-looking statements. These forward-looking statements include, without limitation, statements about our clinical and preclinical programs, product candidates, including their planned development, safety profile and therapeutic potential, plans for future development, preclinical studies and clinical trials in our programs, including the planned initiation of our clinical trials of PGN-EDO51 and PGN-EDODM1, achievement of milestones, and corporate and clinical/preclinical strategies.

Any forward-looking statements in this presentation are based on current expectations, estimates and projections only as of the date of this release 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 that we may fail to successfully complete preclinical studies and clinical trials of our product candidates or to obtain regulatory approval for marketing of such products; initial preclinical study or clinical trial results for one or more of our product candidates may not be predictive of future trial results for such candidates; our product candidates may not be safe and effective; there may be delays in regulatory clearance or changes in regulatory framework that are out of our control; we may not be able to nominate new drug candidates within the estimated timeframes; our estimation of addressable markets of our product candidates may be inaccurate; we may need additional funding before the end of our expected cash runway and may fail to timely raise such additional required funding; more efficient competitors or more effective competing treatments may emerge; we may be involved in disputes surrounding the use of our intellectual property crucial to our success; we may not be able to attract and retain key employees and qualified personnel; earlier-stage trial results may not be predictive of later stage trial outcomes; and we are dependent on third parties for some or all aspects of our product manufacturing, research and preclinical and clinical testing. Additional risks concerning PepGen’s programs and operations are described in its most recent annual report on Form 10-K and/or quarterly report on Form 10-Q on file with the SEC. PepGen explicitly disclaims any obligation to update any forward-looking statements except to the extent required by law.

Our vision

Transforming the lives of patients with severe neuromuscular and neurological diseases

PepGen: Empowering oligonucleotide therapeutics

DMD Program: EDO51

- **20-fold higher** exon 51 skipping than **naked oligo** following a single dose in humans[2]
- Phase 2 CONNECT1-EDO51 DMD patient MAD: **Dystrophin readout mid-2024**
- U.S. revenues of approved therapy (**naked oligo**): $512M[1]

DM1 Program: EDODM1

- **Rx targets toxic DMPK RNA**
- Multi-dose study demonstrates **99% correction** of splicing & myotonia in mice
- **Human PK data** supports EDO ability to achieve target PK
- US & Canada Phase 1 FREEDOM-DM1 study in DM1 patient SAD: **Splicing & Functional readout in 2024**

Company

- **Cash supports operations into 2025**
- Boston based
- Robust IP portfolio on platform technology
- Compelling pipeline

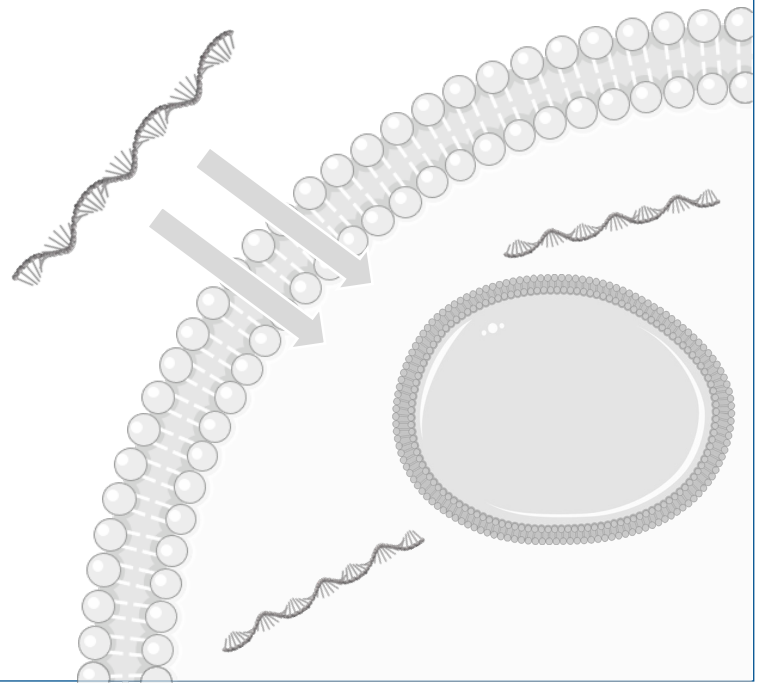
PepGen™

DMD = Duchenne muscular dystrophy; DM1 = myotonic dystrophy type 1
1. EXONDYS 51® 2022 revenue from Sarepta 2022 10K filing, 2. Comparative statements are based on cross-trial comparisons with publicly-available data for other exon skipping approaches that have been assessed following a single dose in humans and following single and multiple doses in NHPs.

PepGen's EDO platform is designed to address the delivery challenges that limit oligonucleotide therapeutics

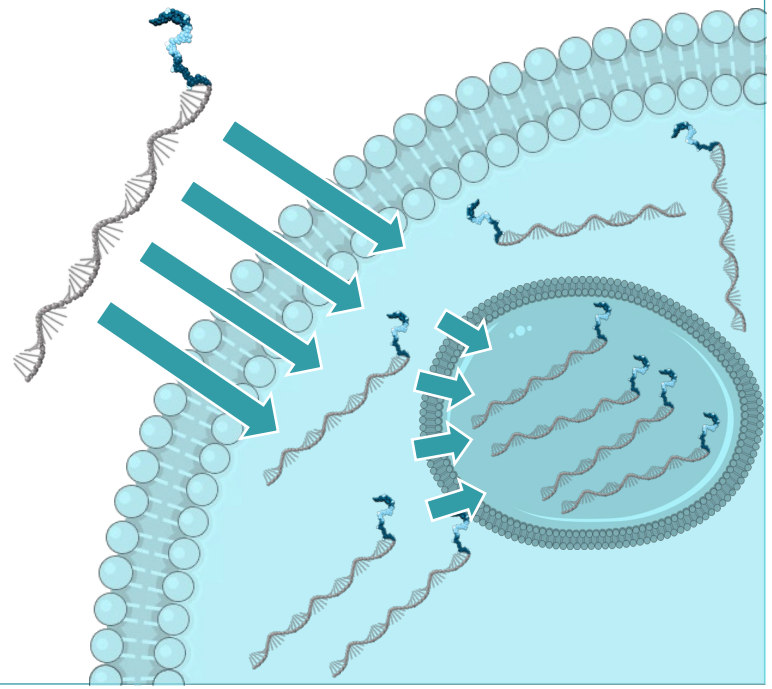
The Challenge of Oligonucleotides

Unconjugated oligonucleotides are **not efficiently taken up into the muscle cells and the nucleus**



PepGen's Enhanced Delivery Oligonucleotides (EDO) Solution

Our EDO platform results in up to 25-fold higher levels of nuclear delivery of oligonucleotide therapeutics



EDOs were designed to optimize delivery of therapeutic oligonucleotides

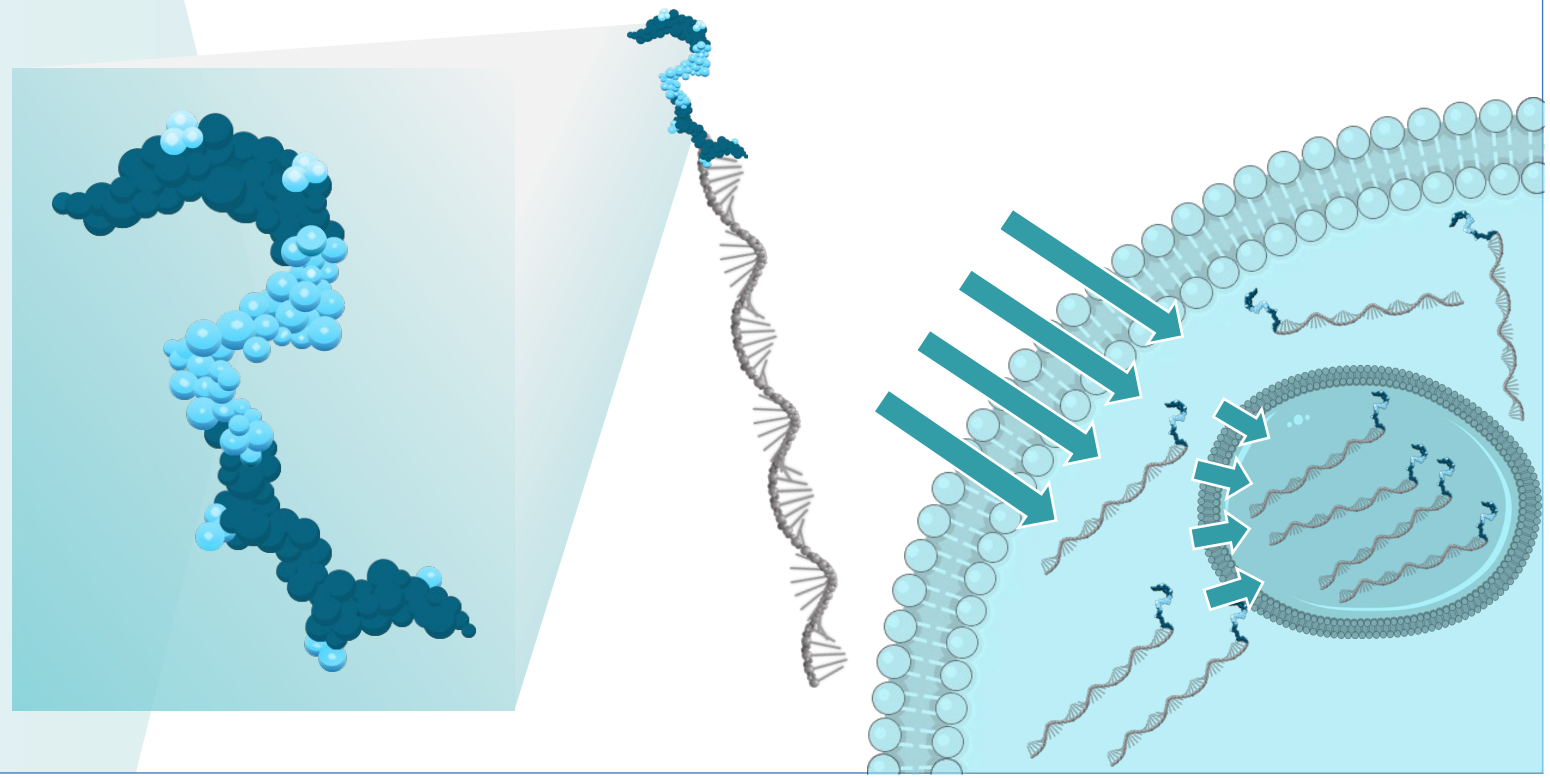
PepGen's EDO Peptides

Designed for enhanced uptake and improved tolerability

- Two poly-Arg domains where the number of arginines have been minimized are interspersed with non-natural amino acids to confer greater peptide stability
- Hydrophobic core coupled with poly-Arg domains contributes to endosomal escape
- Peptide sequence is linear with a length of less than 20 amino acids and is designed to be non-immunogenic

PepGen's EDOs

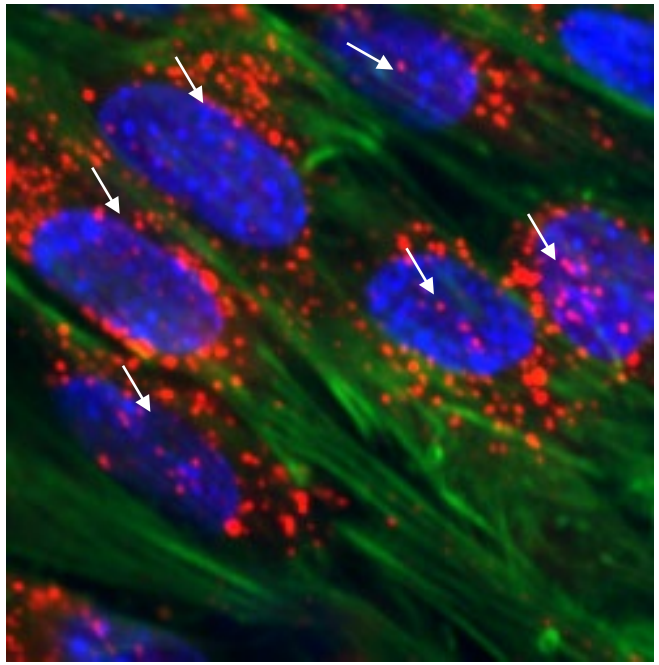
Designed to increase nuclear uptake of oligos in muscle and other target tissues



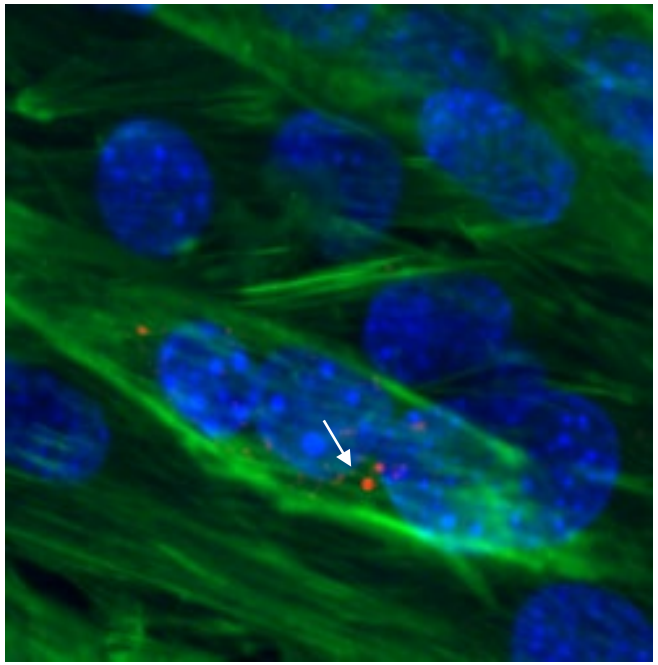
EDO technology resulted in higher nuclear uptake of oligonucleotides vs. naked PMO in muscle cells

Up to 25-fold higher EDO nuclear uptake vs. naked PMO in myotubes

EDO23



PMO23



Green = actin Red = PMO/EDO Blue = nucleus

Note: 1. In vitro staining image is shown with 10μM conc. of EDO or PMO (naked oligonucleotide); 2. C2C12 mouse cells were differentiated for 4 days into myotubes and treated with fluorescently tagged compounds for 24h. Microscopy: Total spot intensity normalized to cellular or nuclear area (± s.d.). PMO: phosphorodiamidate morpholino oligonucleotide

PepGen's advanced pipeline enabled by EDO technology

PROGRAM	INDICATION *TARGET*	DISCOVERY	PRECLINICAL	PHASE 1	PHASE 2	REGISTRA-TIONAL[1]
PGN-EDO51	**Duchenne muscular dystrophy** *Exon 51*					
PGN-EDODM1	**Myotonic dystrophy type 1[2]** *DMPK*					
PGN-EDO53	**Duchenne muscular dystrophy** *Exon 53*					
PGN-EDO45	**Duchenne muscular dystrophy** *Exon 45*					
PGN-EDO44	**Duchenne muscular dystrophy** *Exon 44*					

FUTURE PIPELINE OPPORTUNITIES

Additional neuromuscular indications

Neurologic indications

1. A registrational study is designed to generate data to support a regulatory application, subject to alignment with regulatory authorities. 2. FREEDOM-DM1 study for PGN-EDODM1 has been approved in USA & Canada.

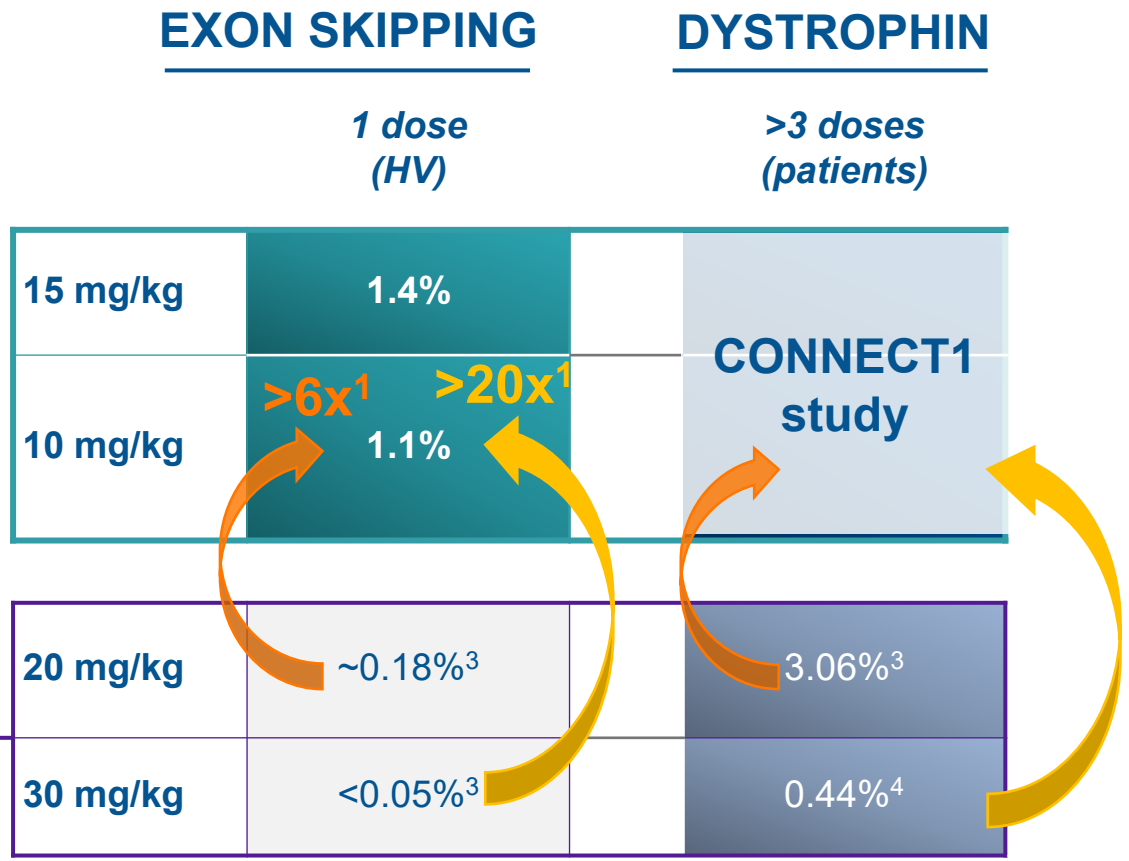
We believe that our delivery platform has the power to unlock the therapeutic potential of oligonucleotides

PGN-EDO51 (Phase 2)

- Potential for greater dystrophin production
- Generally, well tolerated

SRP-5051 (vesleteplirsen) Phase 2b – *Sarepta Therapeutics*

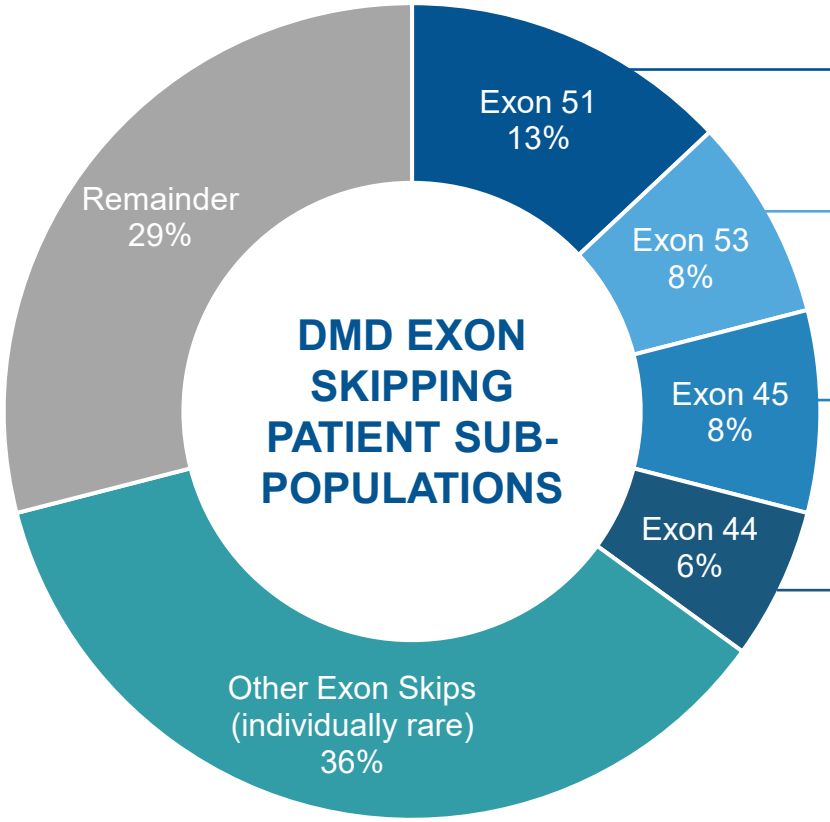
EXONDYS 51® (eteplirsen) – *Sarepta Therapeutics*



1. Comparative statements are based on cross-trial comparisons with publicly-available data for other exon skipping approaches that have been assessed following a single dose. 2. Source: Sarepta 2022 10K filing. 3.Source: Sarepta MOMENTUM study updates, 07Dec20 and 03May21. 4. Clinical data included in drug label (FDA).

PGN-EDO51 for Duchenne muscular dystrophy

PepGen's lead program targets largest exon skipping patient population in DMD



PepGen's clinical program

Exon 51: PGN-EDO51

- *Highest levels of exon skipping observed in humans following a single dose**

PepGen's preclinical programs

Exon 53: PGN-EDO53

- *High levels of exon skipping observed in NHP*

Exon 45: PGN-EDO45

- *High levels of exon skipping observed in human cells*

Exon 44: PGN-EDO44

- *High levels of exon skipping observed in human cells*

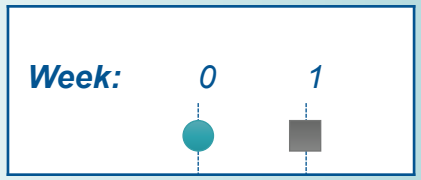
We believe we have potential to address at least 35% of total DMD patient population amenable to exon skipping

Source: https://www.cureduchenne.org/cure/exon-skipping/. * Comparative statements are based on cross-trial comparisons with publicly-available data for other exon skipping approaches that have been assessed following a single dose in humans.

EDO technology increases the potency of exon skipping oligonucleotides

PGN-EDO23
(murine analogue of PGN-EDO51)

WT

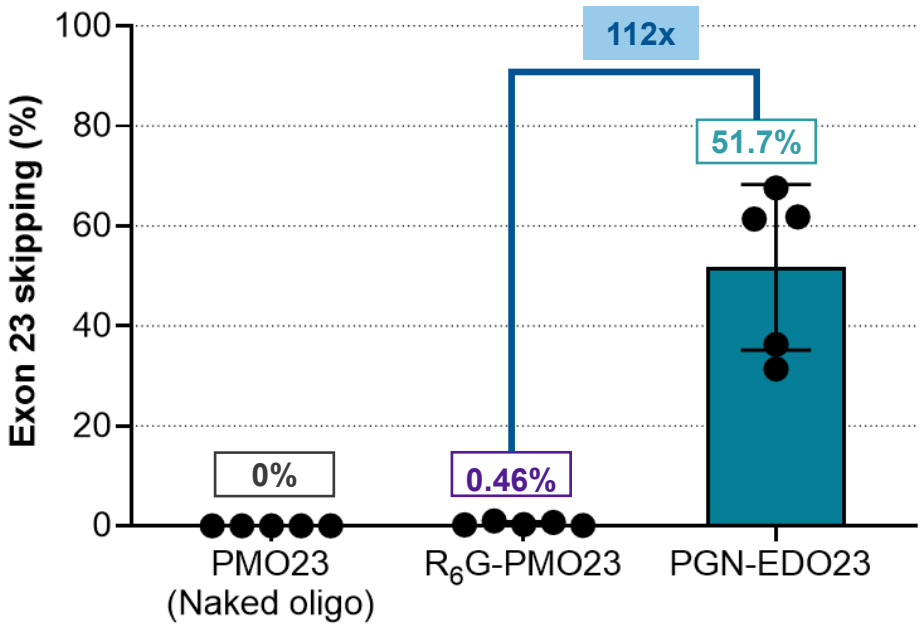


PMO or PPMO dose

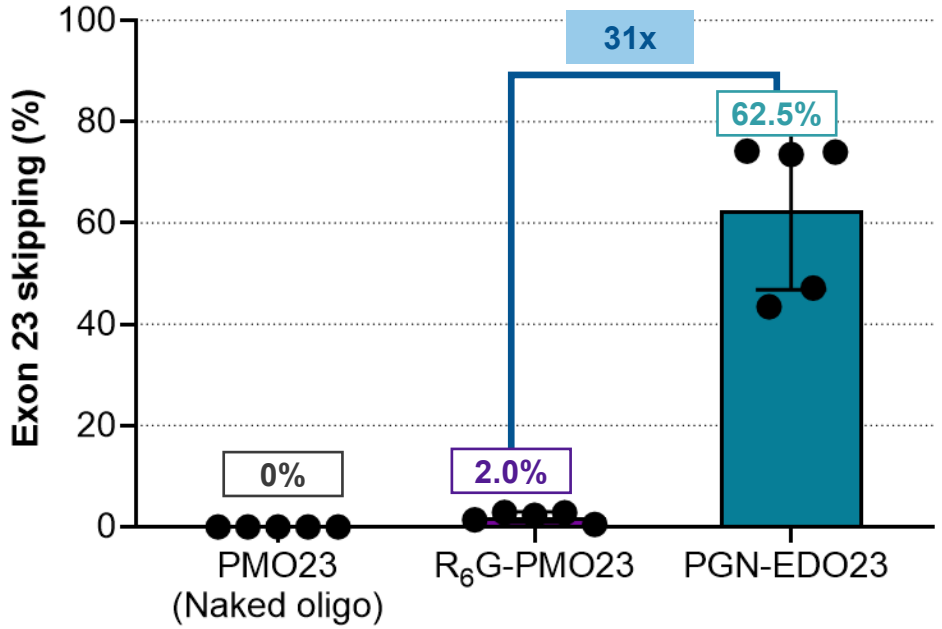
Tissue analysis

EXON SKIPPING

Biceps, 10 mg/kg (qPCR)



Quadriceps, 10 mg/kg (qPCR)

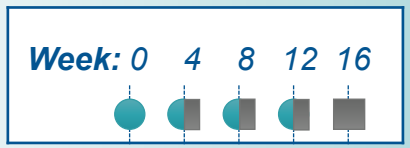


PPMO: Peptide phosphorodiamidate morpholino oligomers. Protocol: PMO23, PGN-EDO23 or R_6G-PMO23 were administered a single intravenous (IV) 10 mg/kg dose to WT male mice; tissues collected 7 days after injection. Exon skipping was evaluated by qPCR. Graph plotted as mean ± SD, n = 5. R_6G-PMO23 is believed to be structurally equivalent to the peptide component of SRP-5051 conjugated to a murine exon 23 skipping oligonucleotide.

Significant increase in dystrophin observed with repeat dosing

PGN-EDO23
(murine analogue of PGN-EDO51)

mdx

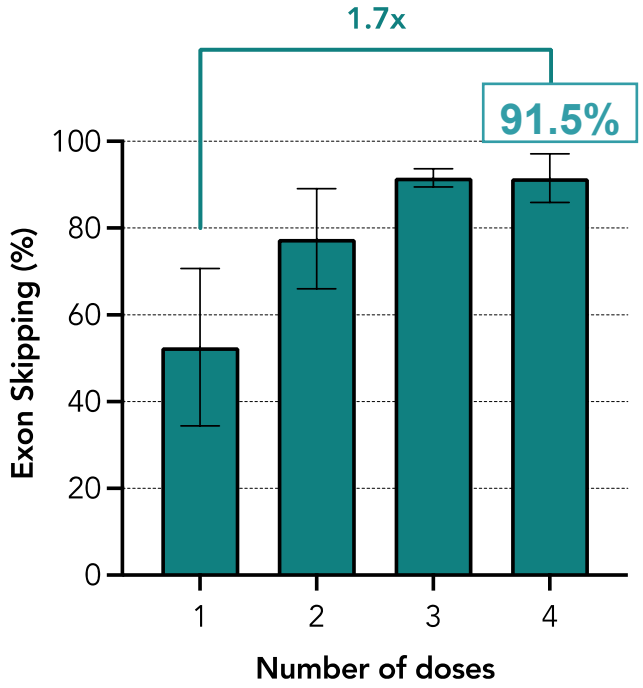


PGN-EDO23 dose

Tissue analysis

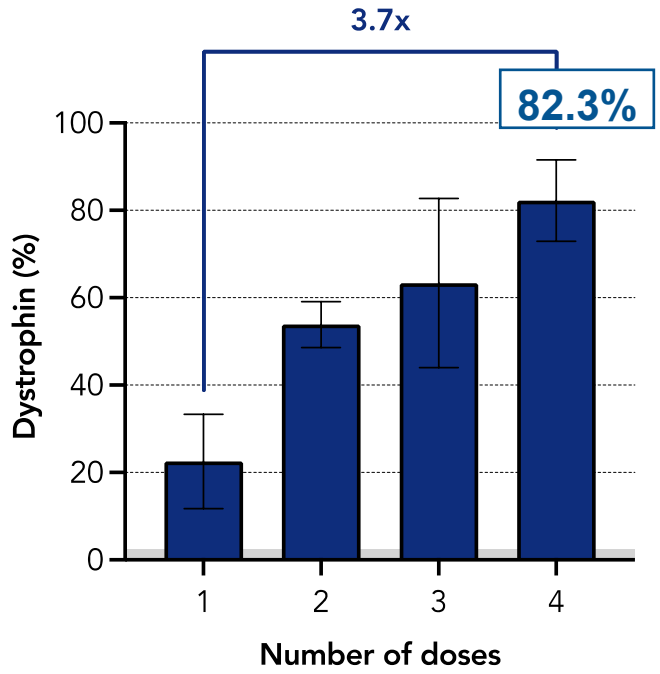
EXON SKIPPING

Biceps, 30 mg/kg, Q4W



DYSTROPHIN

Biceps, 30 mg/kg, Q4W



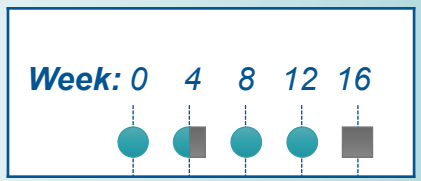
We believe these findings **support Q4W dosing in the clinic**

Protocol: mdx mice received 2, 3 or 4 doses, with 4-week intervals between doses. Tissue samples were collected 4 weeks post-each dose at time points indicated. Exon skipping was evaluated by RT-PCR and dystrophin was measured by western blot. Graph is presented as mean ± SD; n = 4-5 per cohort; grey band is dystrophin LLOQ (2.5%).

Significant increase in dystrophin that was uniformly distributed across muscle

PGN-EDO23 (murine analogue of PGN-EDO51)

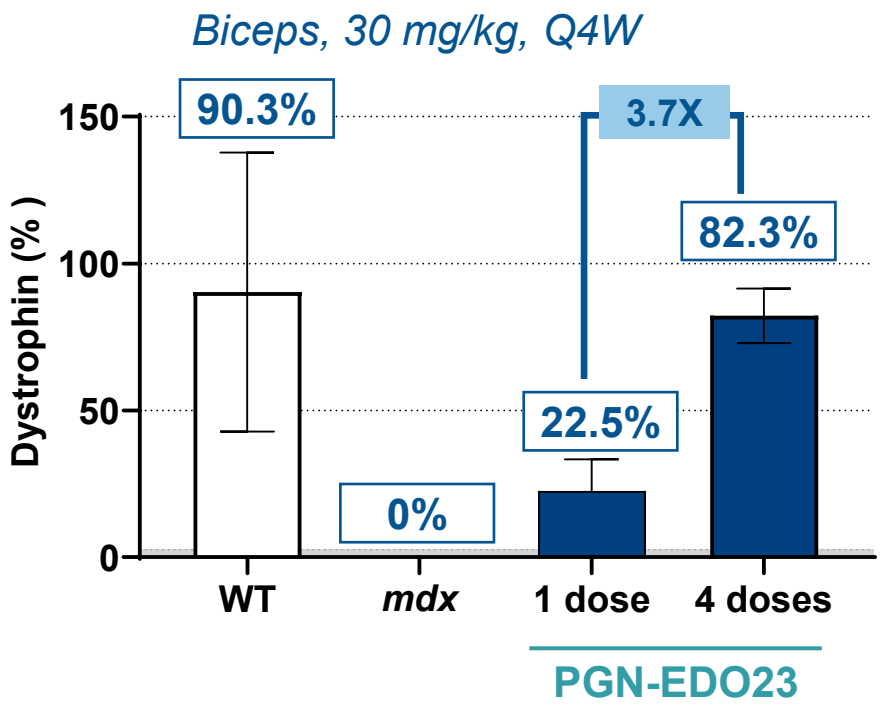
mdx



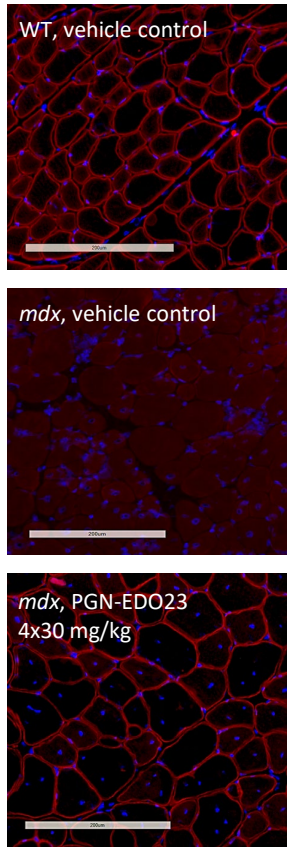
PGN-EDO23

Tissue analysis

DYSTROPHIN (WESTERN BLOT)



DYSTROPHIN (IF)



PERCENT DYSTROPHIN POSITIVE FIBERS

>99%

<0.1%

97.1%

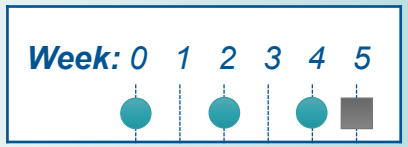
Dystrophin / Nucleus

Protocol: mdx mice received 1 or 4 doses of PGN-EDO23, with 4-week intervals between doses. Tissue samples were collected 4 weeks post-each dose. Dystrophin protein evaluation by western blot and immunofluorescence (IF). IF scale bar = 200 µM. Graph is presented as mean ± SD; n = 4-5 per cohort; grey band is dystrophin LLOQ (2.5%).

NHP: Q2W repeat dose exon skipping levels of >70% observed in skeletal muscles and diaphragm at 30 mg/kg

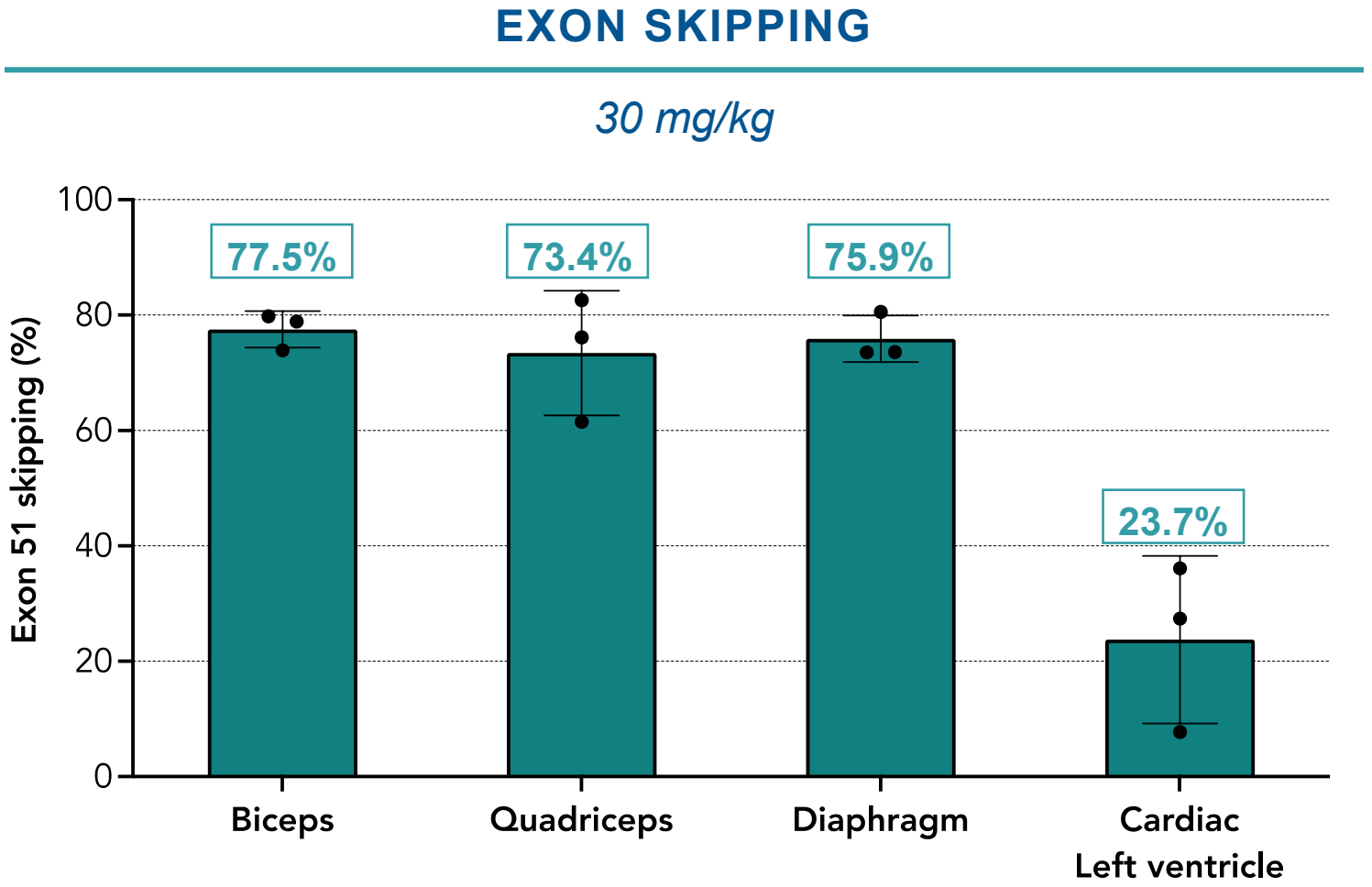
PGN-EDO51

WT



PPMO dose

Tissue analysis



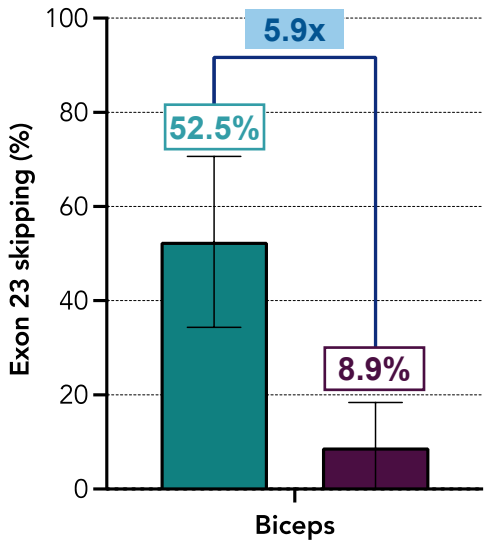
Protocol: Three doses of PGN-EDO51 were administered by IV over 30 min every two weeks (n=3). Tissues were harvested 7 days after final administration. Shown as mean ± SD; n = 3 per group. Study was not powered for statistical significance.

Consistent potency of EDO platform: mouse ➔ NHP ➔ human

MDX SINGLE DOSE

30 mg/kg, RT-PCR

*Generally well-tolerated; no adverse kidney findings**

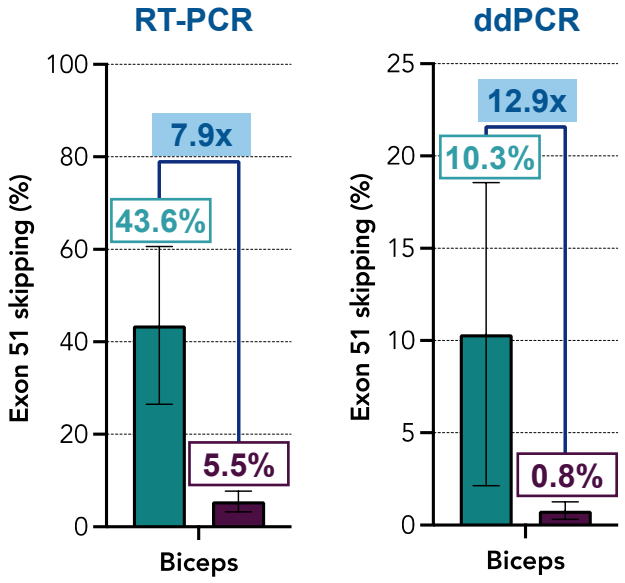


PGN-EDO23 R_6G-PMO23

NHP SINGLE DOSE

30 mg/kg, RT-PCR & ddPCR

Generally well-tolerated; no adverse kidney findings

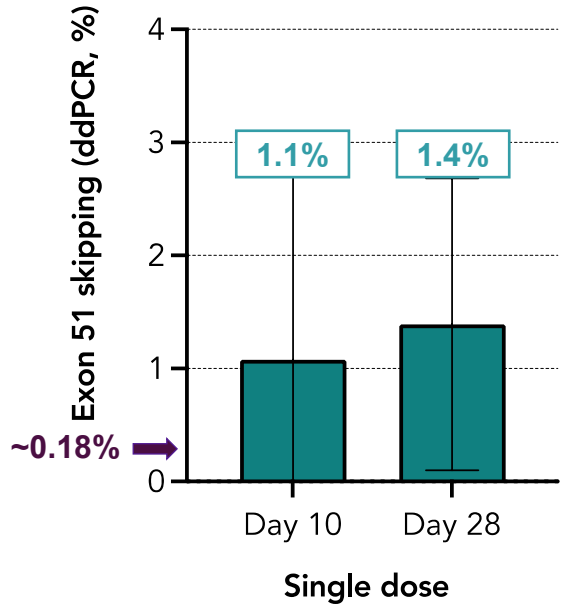


PGN-EDO51 R_6G-PMO51

HV SINGLE DOSE PGN-EDO51

10 mg/kg, ddPCR

All AEs were generally mild & reversible



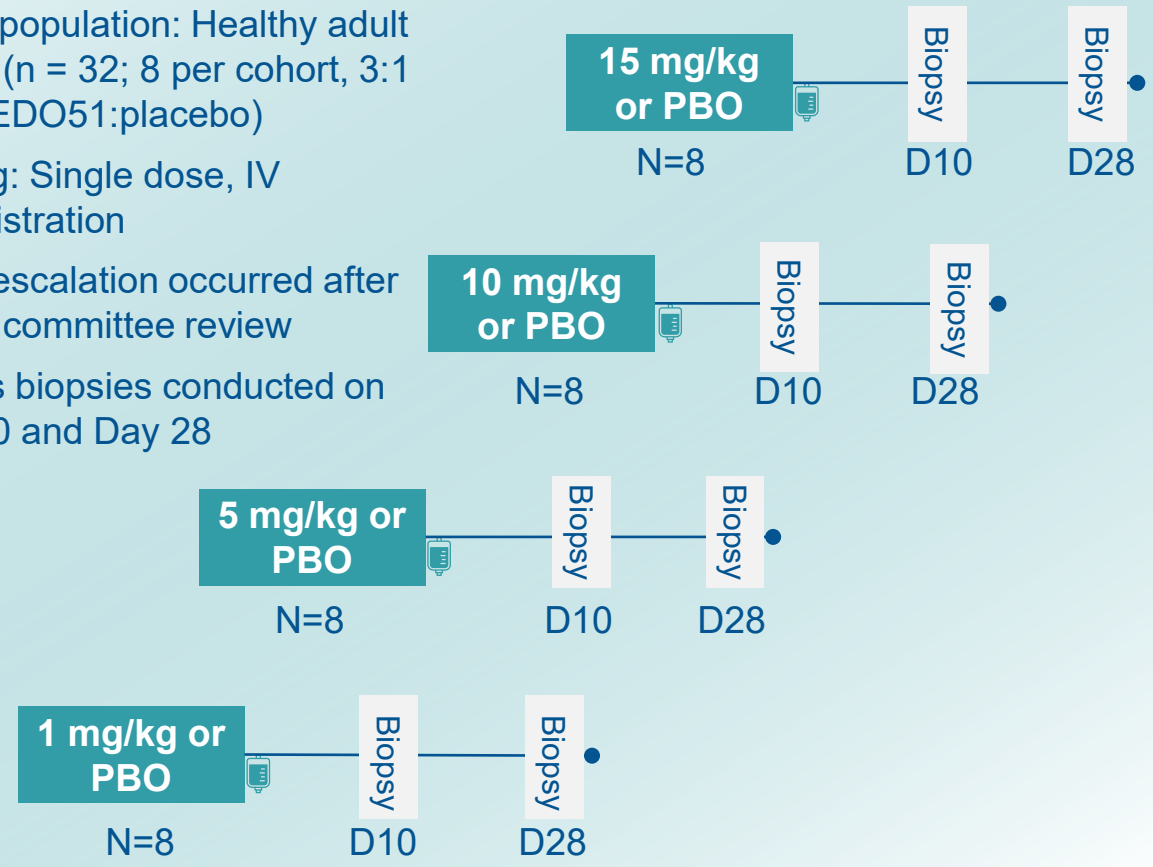
~6x higher than previously reported exon 51 skipping approaches following a single dose

Mdx protocol: PGN-EDO23 and R6G-PMO23 were administered to mdx mice via a single bolus IV injection. Tissues were harvested after four weeks and exon skipping was analyzed via RT-PCR. Data presented as mean ± SD; n = 4 per group. *Tolerability statement supported by single dose GLP study conducted in WT mice. SRP-5051 20 mg/kg HV data from Momentum update, 07Dec20 (comparative statements for human data are based on cross-trial comparisons). R_6G-PMO51 is believed to be structurally equivalent to SRP-5051, R_6G-PMO23 utilizes the murine exon 23 skipping oligo

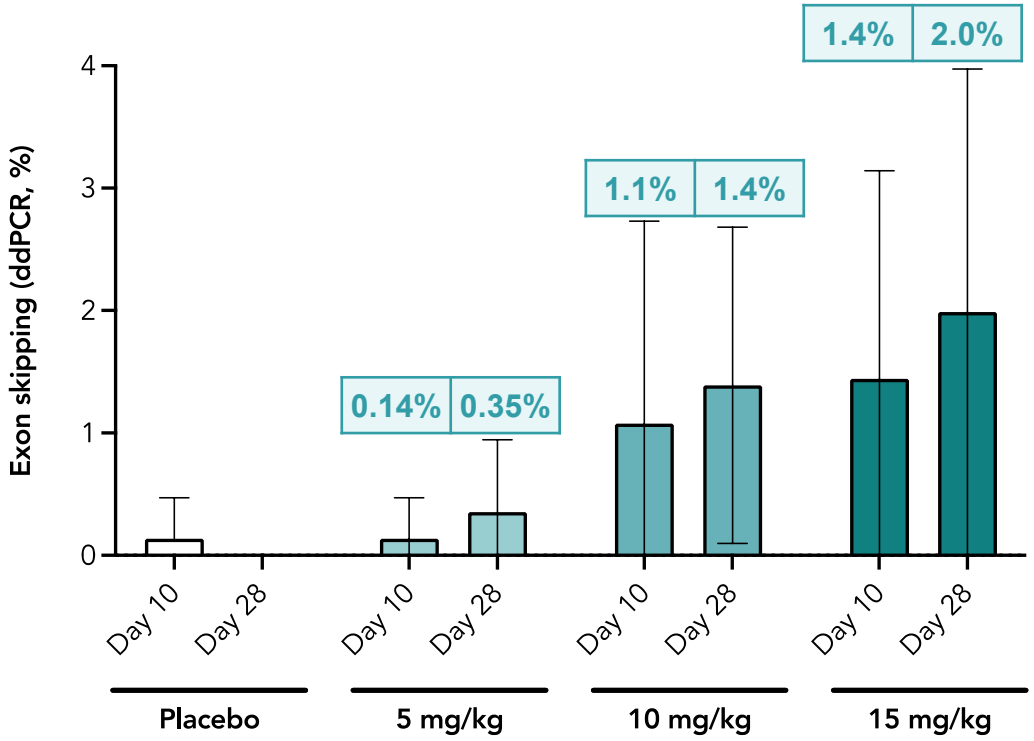
Highest levels of exon 51 skipping in humans following a single dose of PGN-EDO51

PH1 HEALTHY NORMAL VOLUNTEER (HNV) TRIAL DESIGN

- Study population: Healthy adult males (n = 32; 8 per cohort, 3:1 PGN-EDO51:placebo)
- Dosing: Single dose, IV administration
- Dose escalation occurred after safety committee review
- Biceps biopsies conducted on Day 10 and Day 28

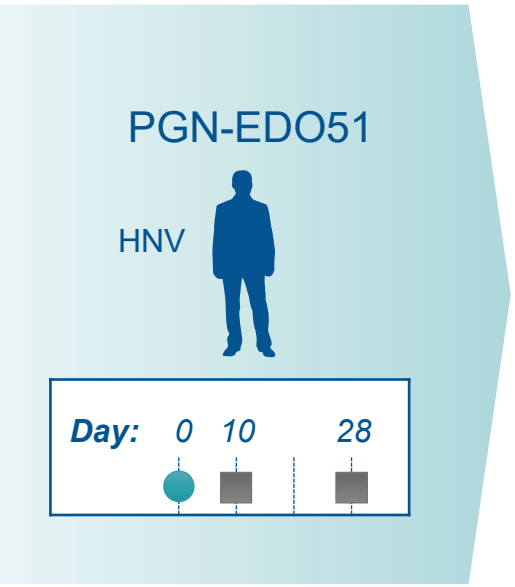


TRIAL RESULTS: EXON SKIPPING (BICEPS)

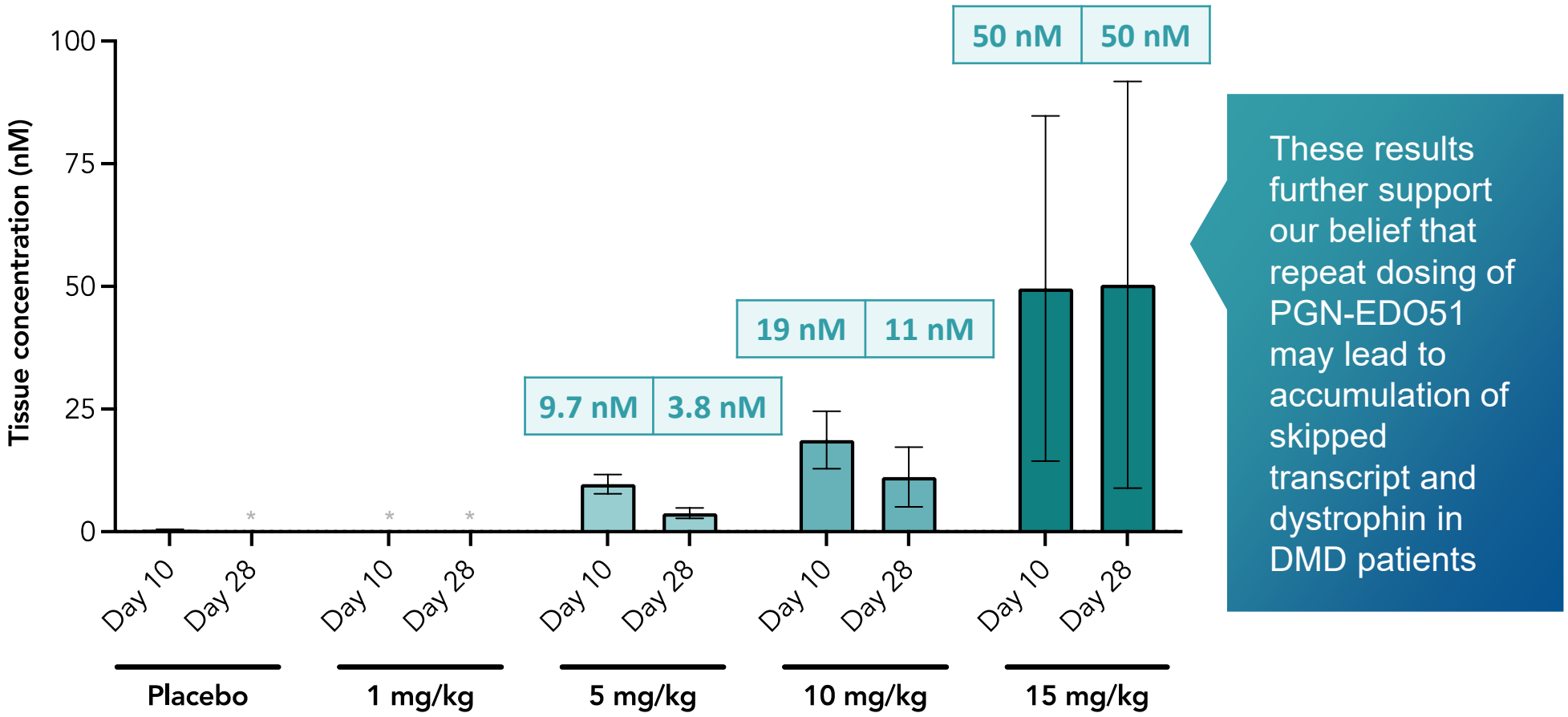


Protocol PGN-EDO51-101: Phase 1, first in human, randomized double blind, placebo controlled single ascending dose study in healthy adult volunteers. Single dose of either PGN-EDO51 or Placebo were administered by IV infusion at doses indicated. Participants were followed for 28-day period following dose administration to evaluate safety, tolerability, PK, and PD. Needle biopsies of biceps muscle were taken on Day 10 and Day 28. Exon skipping measured by ddPCR. Shown as mean ± SD; n = 6 PGN-EDO51: 2 Placebo per cohort (n = 5 for D10 at 15 mg/kg).

HNV: High, persistent tissue concentrations of oligonucleotide were observed



TISSUE CONCENTRATION (BICEPS)



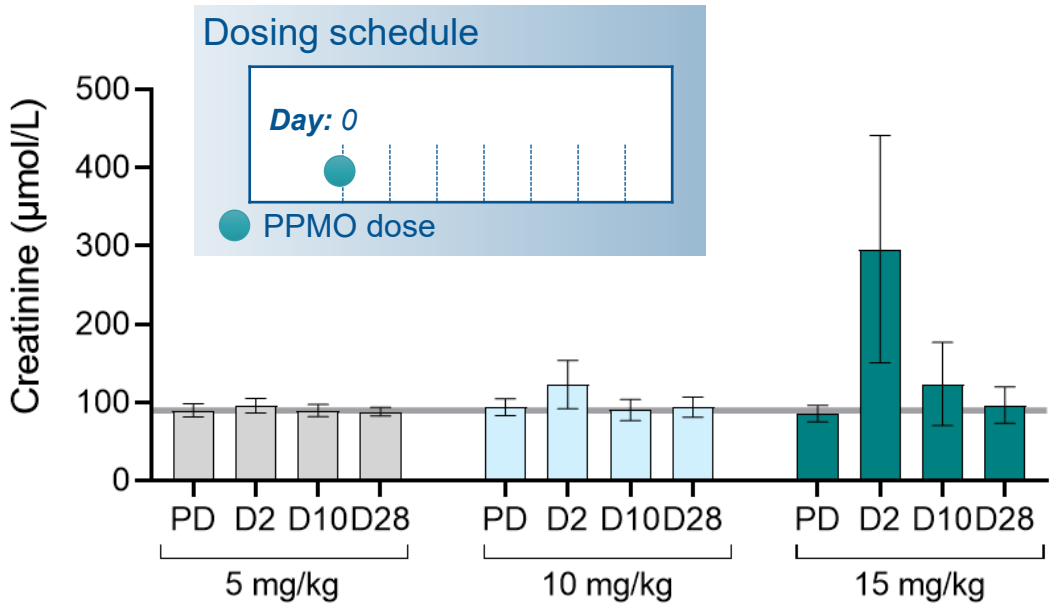
These results further support our belief that repeat dosing of PGN-EDO51 may lead to accumulation of skipped transcript and dystrophin in DMD patients

Protocol PGN-EDO51-101: Phase 1, first in human, randomized double blind, placebo controlled single ascending dose study in healthy adult volunteers. Single dose of either PGN-EDO51 or Placebo were administered by IV infusion at doses indicated. Participants were followed for 28 day period following dose administration to evaluate safety, tolerability, PK, and PD. Needle biopsies of biceps muscle were taken on Day 10 and Day 28. Tissue concentration measured by ELISA. Shown as mean ± SD; n = 6 PGN-EDO51: 2 Placebo per cohort (n = 5 for D10 at 15 mg/kg. Asterix indicates that values were under the lower limit of quantitation.

Changes in creatinine are transient and are minimal with repeat dosing

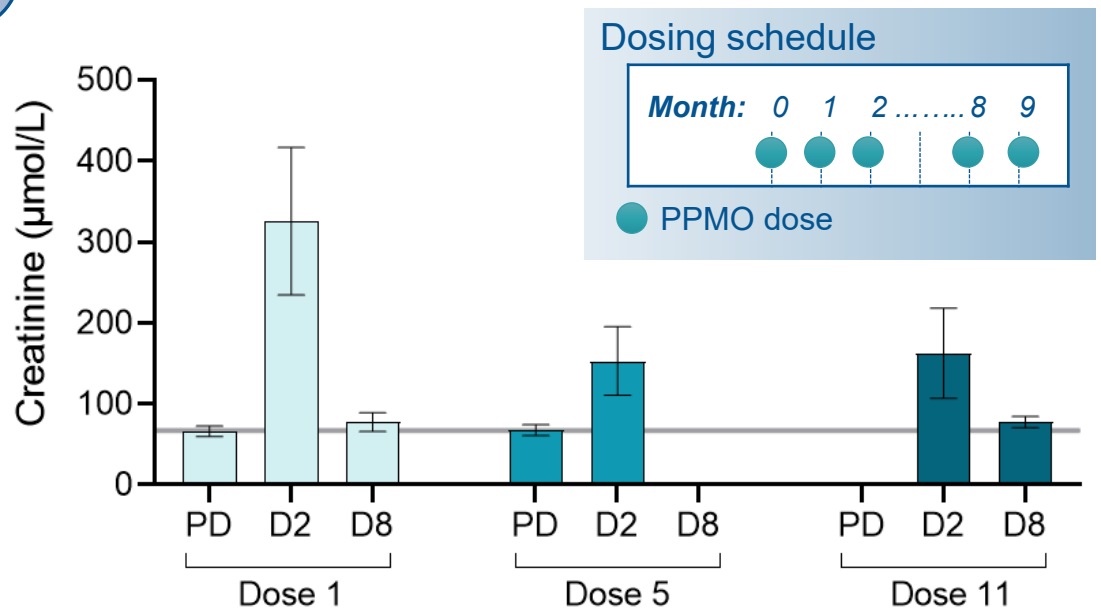
We believe these results support the potential tolerability of PGN-EDO51 with repeat dosing

PGN-EDO51 SINGLE-DOSE SERUM CREATININE



- Transient increase in serum creatinine resolved within 48 hours post-dose in the majority of HVs
- No clinical symptoms of acute kidney injury
- No hematologic, cardiovascular or hepatic clinical signs or symptoms

PGN-EDO51 REPEAT-DOSE SERUM CREATININE



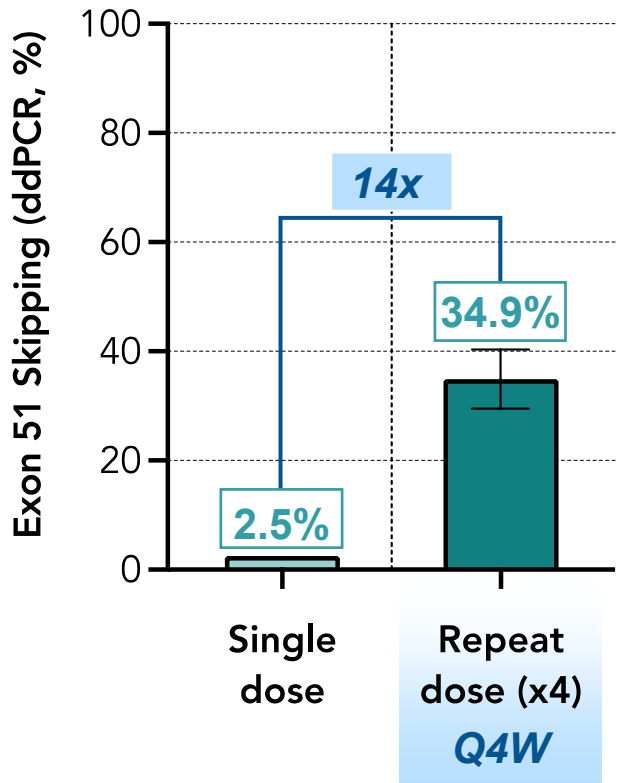
- Transient increase in serum creatinine resolved within a week post-dose
- No adverse findings in the kidney even after 11 doses at all dose levels tested
- No notable hematologic, cardiovascular or hepatic effects

PD = pre-dose. NHP Protocol: PGN-EDO51 was administered to NHP by IV infusion at 45 mg/kg over 60 min (n=12) for 11 doses. Dosing schedule was once every 28 days. Shown as mean ± SD. HV study: Shown as mean ± SD; n = 6 per dose cohort

Increased exon skipping in NHPs with repeat dosing supports transformative potential for PGN-EDO51

NHP SINGLE VS. REPEAT

Biceps, 20 mg/kg, ddPCR



14X increase in exon skipping with repeat dosing in NHPs portends transformative potential for PGN-EDO51 in DMD patients

PATIENT REPEAT DOSE

OPEN

CONNECT1-EDO51
Ph2 open-label MAD study in patients *(opened in 1H 2023)*
- 3-month Q4W dosing
- Initial dystrophin, exon skipping and safety data anticipated in 2024

Connect 1
EDO51

NHP protocol: Single (30 min) or repeat (60 min) IV doses with PGN-EDO51 were administered in male NHP. For repeat dose evaluation, NHP received 4 doses with 4-week intervals between doses. Tissue samples were collected 1-week post-final dose as indicated on graphs. Exon skipping was assessed by ddPCR. Graph is presented as mean ± SD; n = 3-8 per group.

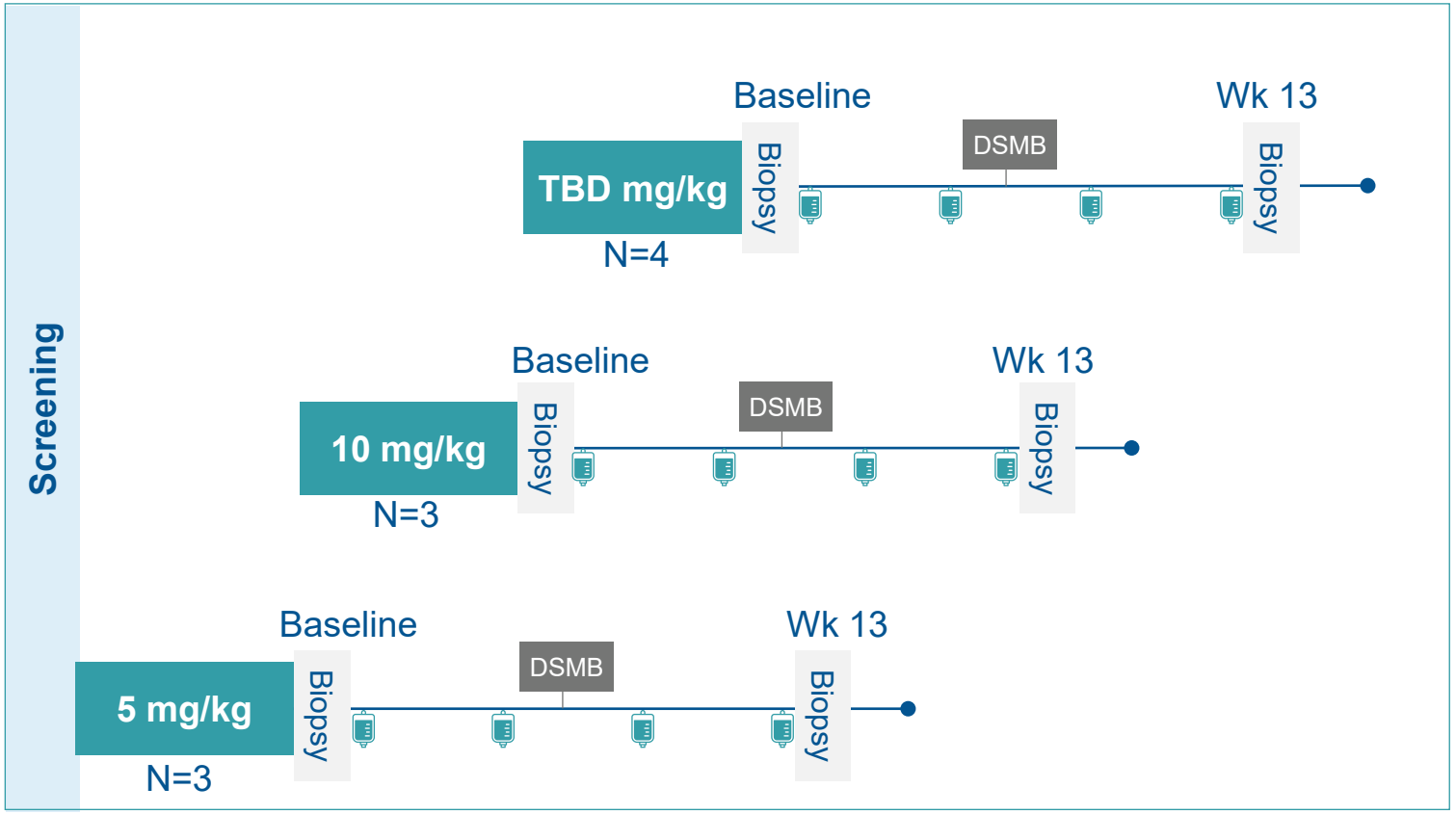
CONNECT1 Phase 2 PGN-EDO51 MAD study

Connect 1
EDO51

CONNECT1 study overview

- Open label study in DMD patients
- Study is open in Canada
- IV administration of PGN-EDO51 every 4 weeks
- Muscle biopsies at baseline and week 13
- Key endpoints: Safety biomarkers, dystrophin, exon skipping
- Data expected in 2024

PGN-EDO51 dosing Q4W for a treatment period of 12 weeks



Two PGN-EDO51 Phase 2 MAD studies in 2024

OPEN

CONNECT1-EDO51
Ph2 open-label MAD study in patients *(opened in 1H 2023)*

Connect 1 EDO51

- 3-month Q4W dosing
- Exon skipping, dystrophin and safety data anticipated in 2024

PLANNED

CONNECT2-EDO51
Ph2 randomized, double-blind, placebo-controlled MAD study in patients

Connect 2 EDO51

- 6-month Q4W repeat dosing
- Exon skipping, dystrophin and safety data
- Functional measures
- Designed to provide potential path to accelerated approval

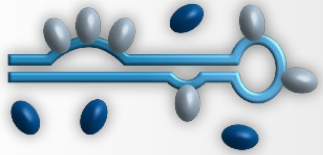
CTA: Clinical trial application; MAD: Multiple ascending dose, Note: Clinical plans are subject to alignment with regulatory authorities

PGN-EDODM1 for myotonic dystrophy type 1 (DM1)

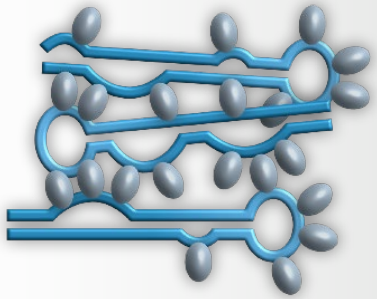
PepGen's novel therapeutic approach to DM1

DM1 PATHOLOGY

***DMPK* transcript CUG repeat hairpin loops bind MBNL1 and form cross-linked foci**

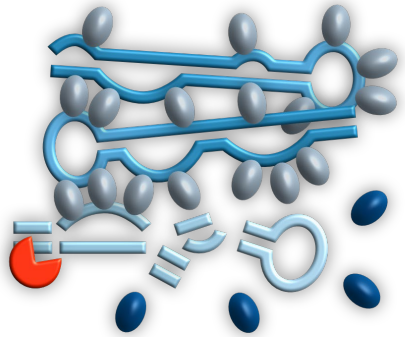


Expanding toxic foci trap more MBNL1



DMPK DEGRADATION

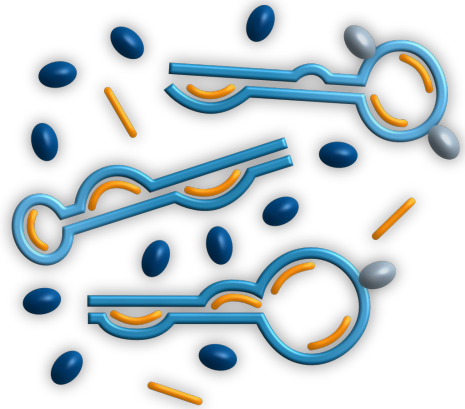
ASO / siRNA degrade *DMPK* transcript to reduce toxic foci



- Treatment results in non-specific degradation of *DMPK* transcript; potential risk of haploinsufficiency
- Correlation between level of knockdown and level of splicing correction is uncertain

DMPK COMPETITION

PGN-EDODM1 binds *DMPK* transcript, reducing toxic foci



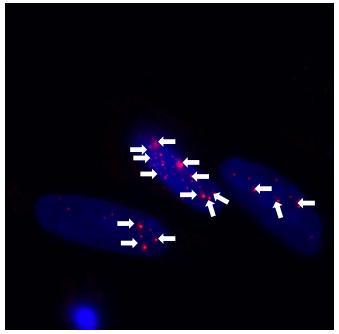
- Binding of PGN-EDODM1 liberates MBNL1, restoring physiological splicing
- *DMPK* transcript retained; role in cellular processes uninterrupted

PepGen™ denotes free (active) MBNL1, denotes bound (inactive) MBNL1, denotes PGN-EDODM1, denotes knockdown approach.
Other approaches also in development, including gene and RNA editing, and treatment of downstream pathologies.

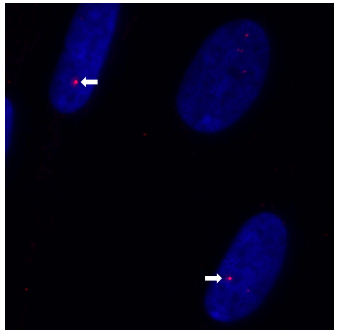
PGN-EDODM1 reduced pathogenic nuclear foci, liberated MBNL1 and corrected mis-splicing in patient cells

FOCI REDUCTION

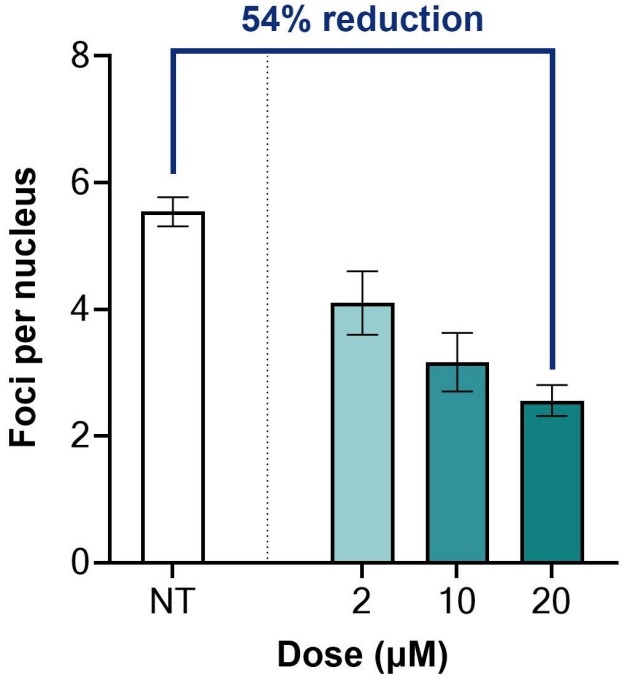
Not treated (NT)



PGN-EDODM1

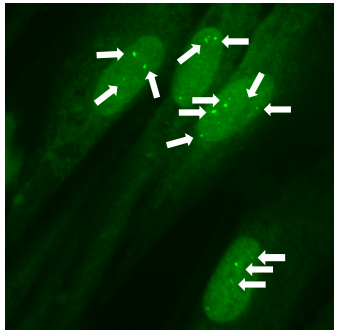


Foci quantification

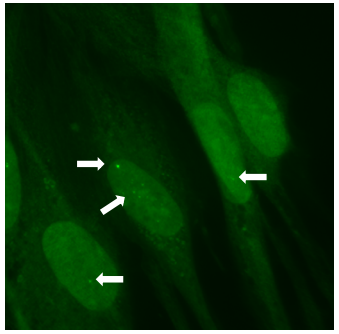


MBNL1 LIBERATION

Not treated (NT)

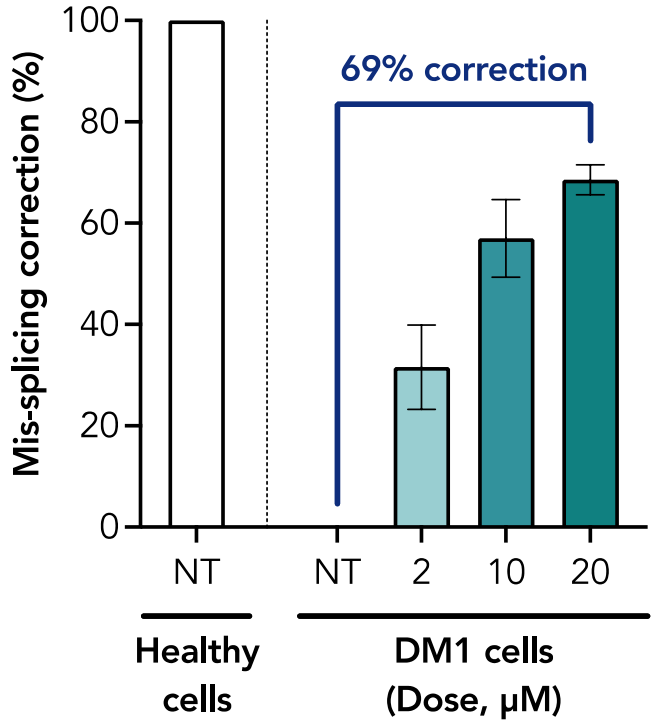


PGN-EDODM1



MIS-SPLICING CORRECTION

Across multiple transcripts



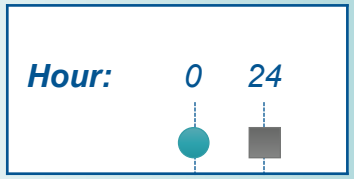
Immortalized myoblasts from healthy individual or DM1 patient with 2600 CTG repeats were cultured then differentiated for 4 days into myotubes. Treatment with peptide-PMO conjugates at concentrations given. Cells were harvested for analysis 24h after treatment. RNA isolation, RT-PCR and capillary electrophoresis (QIAxcel) analysis was performed. Visualization with FISH and immunofluorescence microscopy. Mean ± SD; n = 5 per group.

Our *DMPK* competition mechanism of action does not degrade *DMPK*

DMPK TRANSCRIPT LEVELS

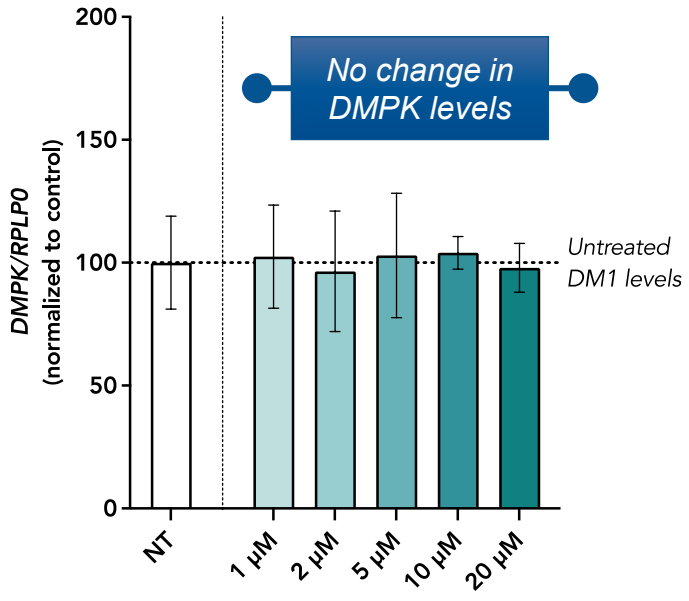
PGN-EDODM1

DM1 patient cells (2,600 CTG repeats)



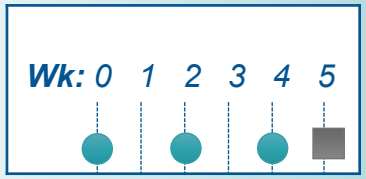
PGN-EDODM1 dose

Analysis



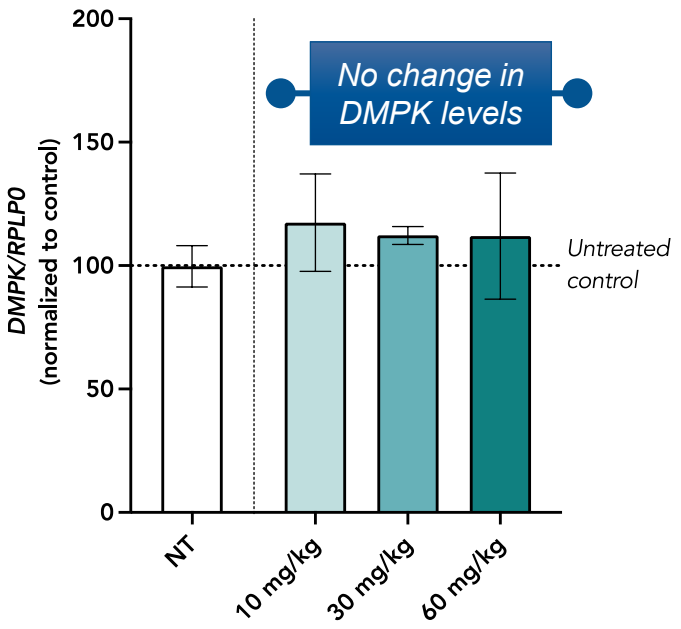
PGN-EDODM1

WT



PGN-EDODM1 dose

Tissue analysis



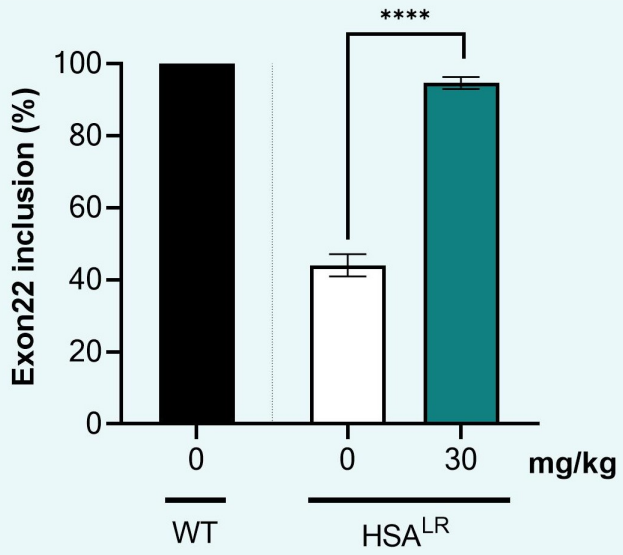
DMPK transcript levels remained unchanged across multiple preclinical models

In vitro: Immortalized myoblasts from DM1 patient with 2600 CTG repeats were differentiated for 4 days to myotubes and treated for 24h hours with PGN-EDODM1 from 1-20 µM. NT = not treated. DMPK transcript levels were evaluated by qPCR and normalized to RPLP0. Graphs plotted as mean ± SD, n=3-4. NHP: PGN-EDODM1 was administered to NHPs at the doses and regimen indicated. DMPK transcript levels were evaluated by RT-PCR and normalized to RPLP0. Graphs plotted as mean ± SD, n=4. NT = not treated. RPLP0 Ribosomal Protein Large, P0.

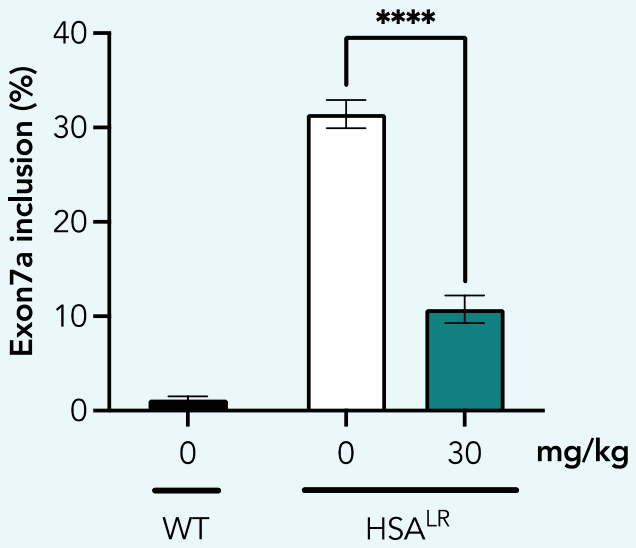
PGN-EDODM1 achieved >68% correction of mis-splicing and complete reversal of myotonia with a single dose in HSA^{LR} mice

MIS-SPLICING CORRECTION

Atp2a1
(encodes SERCA1 – intracellular Ca^{+} pump involved in muscle excitation)

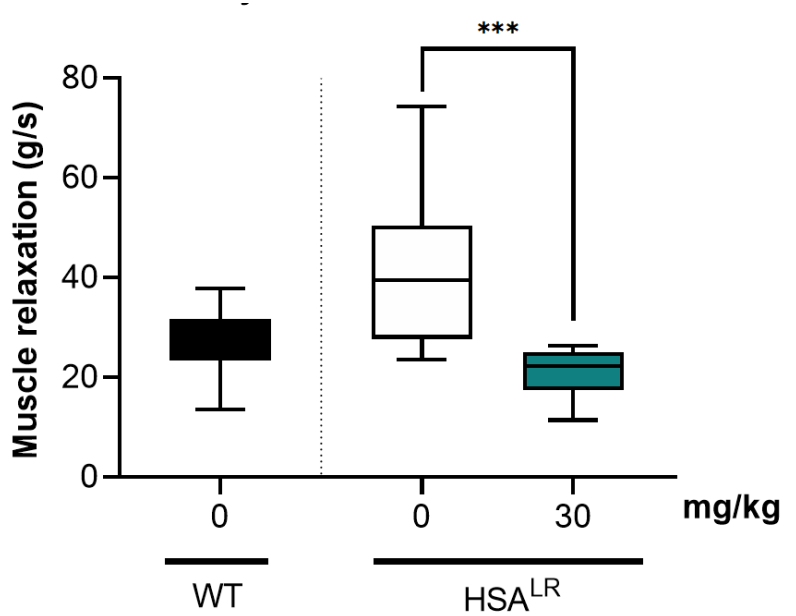


Clcn1
(encodes voltage-dependent Cl^{-} channel involved in muscle excitation)



REVERSAL OF MYOTONIA

Electrophysiology



91% correction of Atp2a1 splicing

68% correction of Clcn1 splicing

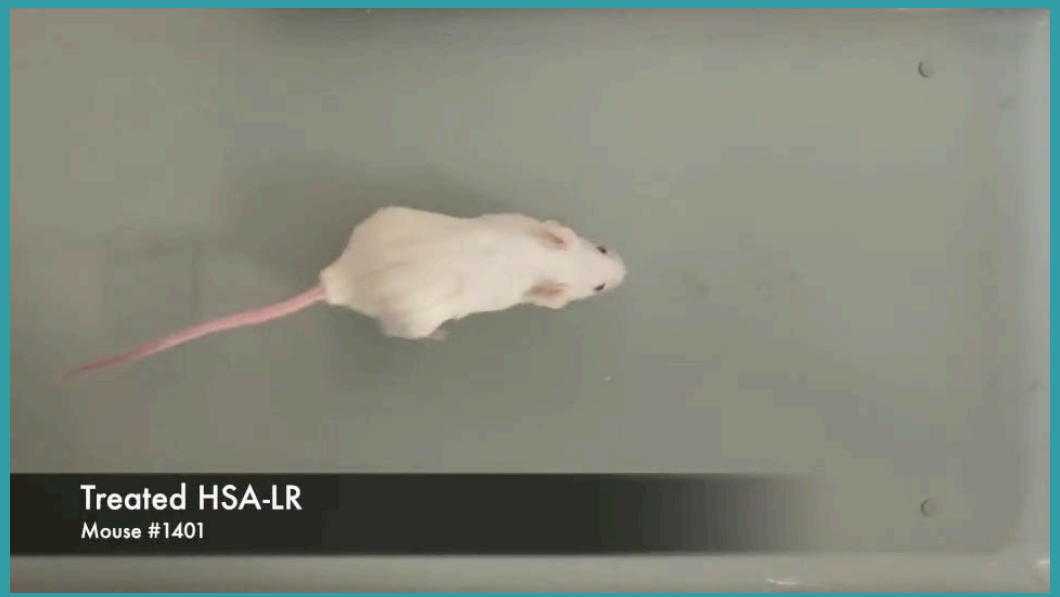
Complete correction of myotonia observed after single dose

Protocol: PGN-EDODM1 was administered IV to HSA^{LR} mice at 30 mg/kg (n=8) against a saline control (n=16) and wild-type (WT) saline control (n=8). Myotonia assessed, tissues harvested 2 weeks post-administration. Mis-splicing data is quadriceps. Mean ± SEM or min to max. **** = p≤0.0001; *** = p≤0.001. Mis-splicing correction of Mbnl1 was also assessed.

PGN-EDODM1 corrected movement disorder of DM1 mouse model

UNTREATED HSA^{LR}

TREATED HSA^{LR}



Protocol: PGN-EDODM1 was administered intravenously (IV) to WT and HSA^{LR} mice at 50 mg/kg (n=4-16); myotonia assessed two weeks post-administration.

Significant improvement of DM1 pathology with a single dose further increased with repeat dosing

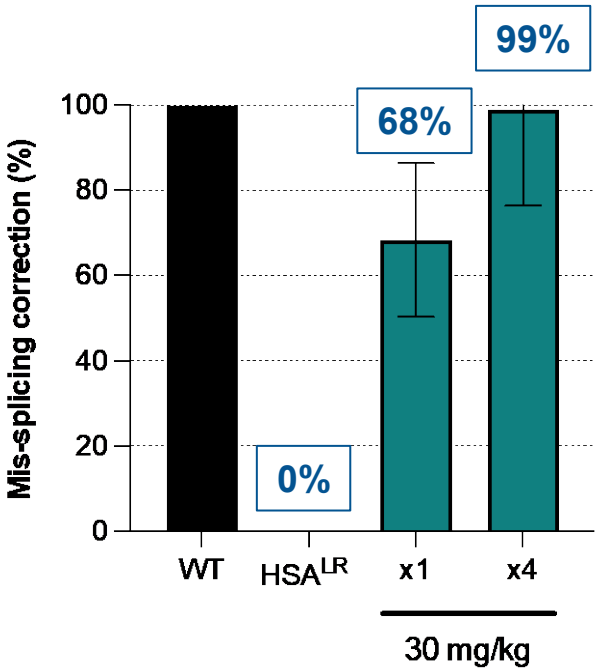
PGN-EDODM1

PGN-EDODM1 dose

Tissue/myotonia analysis

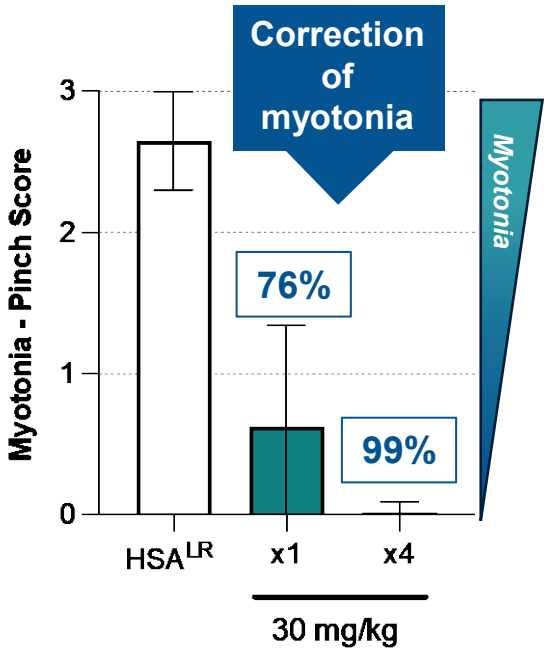
MIS-SPLICING CORRECTION

Across multiple transcripts



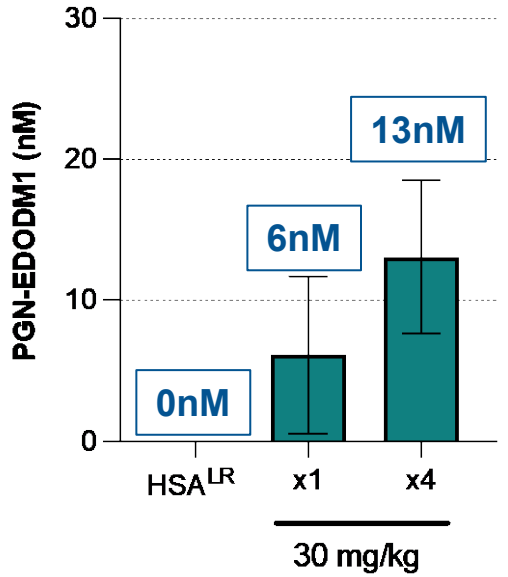
REVERSAL OF MYOTONIA

Pinch test



TISSUE CONCENTRATION

Skeletal muscle



EDO technology resulted in activity in HVs while achieving PMO conc. >11nM with a single dose; therefore, we expect meaningful improvement in key biomarkers with a single dose in FREEDOM DM1

PepGen™

Protocol: HSA^{LR} mice received 1 or 4 doses of PGN-EDODM1, with 4-week intervals between doses. Skeletal muscle tissues were collected 4 weeks post-final dose. Mis-splicing analysis considers multiple transcripts. Graph is presented as mean ± SD; n = 8-12 per cohort per transcript. Myotonia pinch test was performed 4 weeks post-final dose. Grade 3 = Clear sign of myotonia strong AND reproducible , Grade 2 = Clear sign of myotonia, strong OR reproducible, Grade 1 = Clear sign of myotonia but non reproducible, Grade 0 = No sign of myotonia. Graph is presented as mean ± SD; n = 12-43 per cohort. Skeletal muscle tissue concentration was measured by fluorescent based HPLC method. Graph is presented as mean ± SD; n = 8-12 per cohort.

FREEDOM-DM1 clinical development strategy

Freedom DM1

OPEN in USA, CANADA & UK

FREEDOM-DM1: PHASE 1
Single ascending dose (SAD): Interim data readout expected in 2024

- Being conducted in DM1 patients
- Randomized, double-blind, placebo-controlled trial
- Key anticipated readouts: **Functional assessments, correction of mis-splicing, safety data**

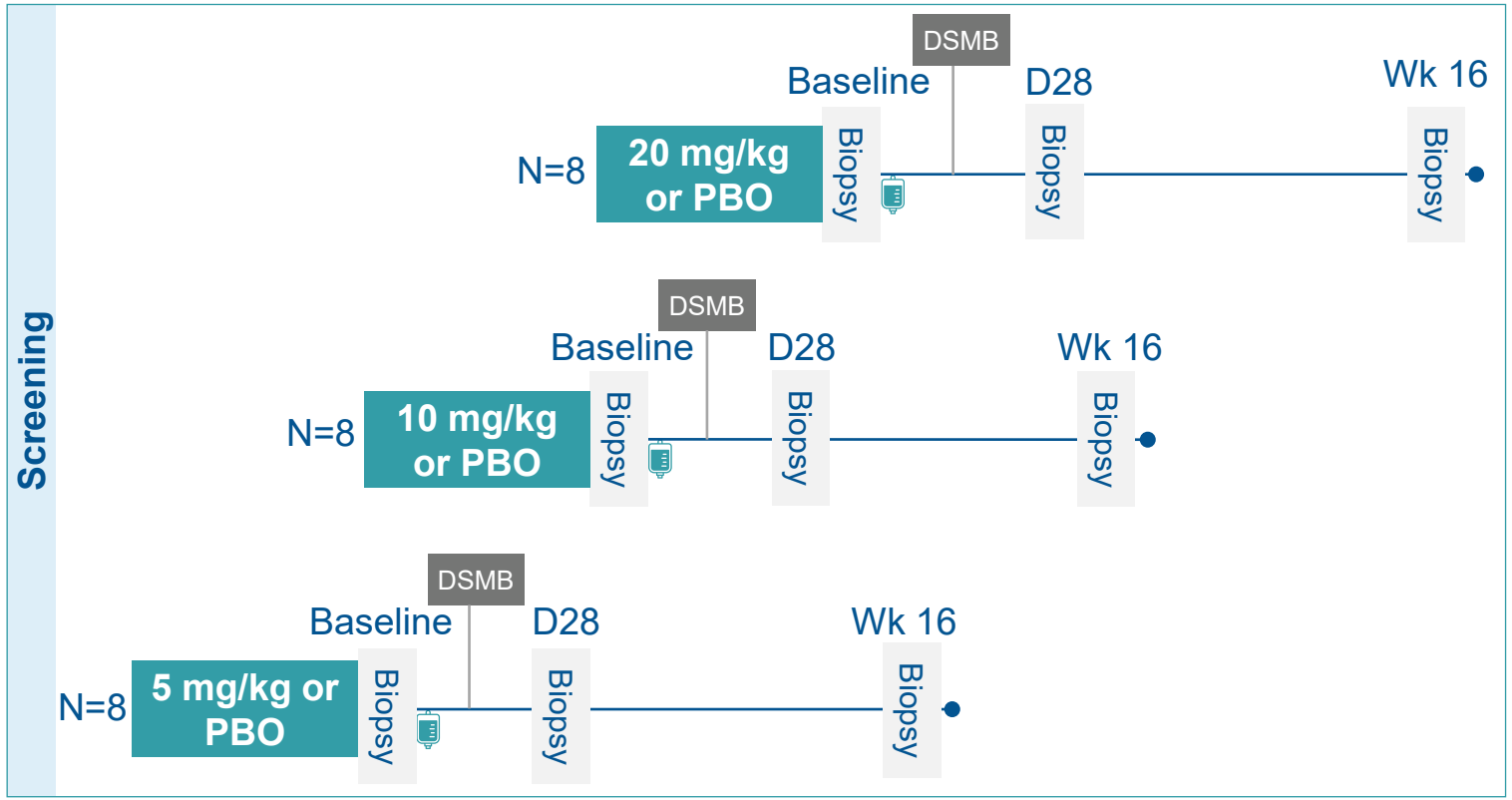
FREEDOM-DM1: Phase 1 PGN-EDODM1 SAD study

Freedom DM1

FREEDOM-DM1 study overview

- Ph1 global, randomized, double-blind, placebo-controlled SAD study in patients
- Single IV administration of PGN-EDODM1
- Muscle biopsies at baseline, day 28, week 16
- Initial functional assessments, correction of mis-splicing and safety data anticipated in 2024

Single Dose PGN-EDODM1 or Placebo (randomized 3:1)



FREEDOM-DM1 will inform Phase 2 MAD study

OPEN in USA & CANADA & UK

FREEDOM-DM1: PHASE 1
Single ascending dose (SAD): Interim data read out expected in 2024

- To be conducted in DM1 patients
- Randomized, double-blind, placebo-controlled trial
- Key anticipated readouts: **Functional assessments, correction of mis-splicing, safety data**

Freedom
DM1

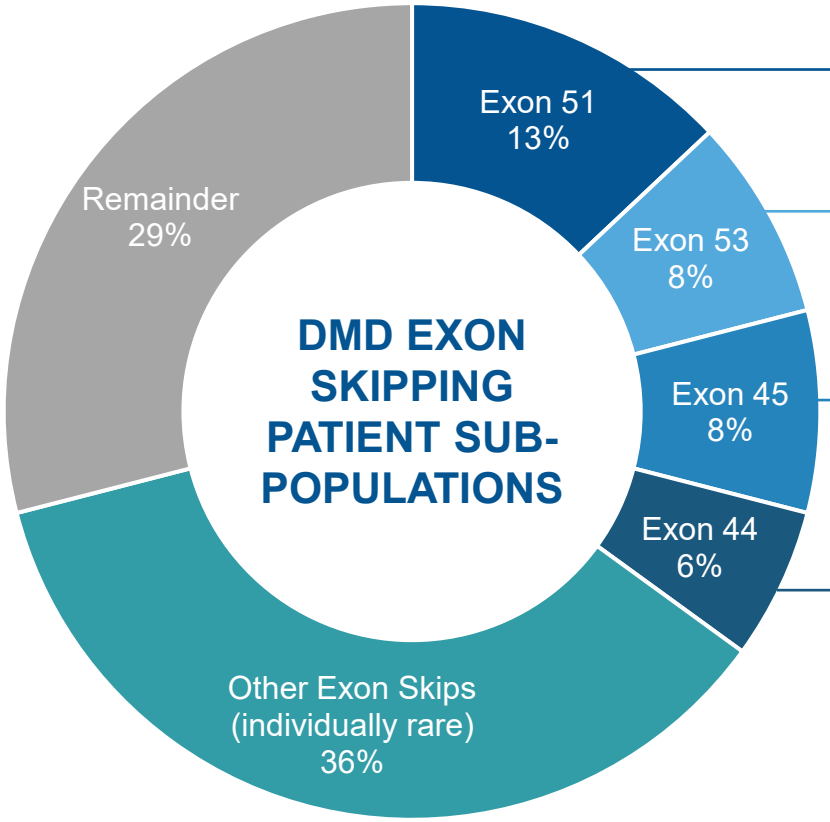
GLOBAL STUDY PLAN

PHASE 2 MAD study (designed to support discussions for potential regulatory approvals)

- To be informed by Phase 1 safety data
- 3-month study followed by LTE in DM1 patients
- Randomized, double-blind, placebo-controlled trial
- Key anticipated readouts: **Functional assessments, correction of mis-splicing, safety data**

EDO preclinical stage pipeline

PepGen's lead program targets largest exon skipping patient population in DMD



PepGen's clinical program

Exon 51: PGN-EDO51

- *Highest levels of exon skipping observed in humans following a single dose**

PepGen's preclinical programs

Exon 53: PGN-EDO53

- *High levels of exon skipping observed in NHP*

Exon 45: PGN-EDO45

- *High levels of exon skipping observed in human cells*

Exon 44: PGN-EDO44

- *High levels of exon skipping observed in human cells*

We believe we have potential to address at least 35% of total DMD patient population amenable to exon skipping

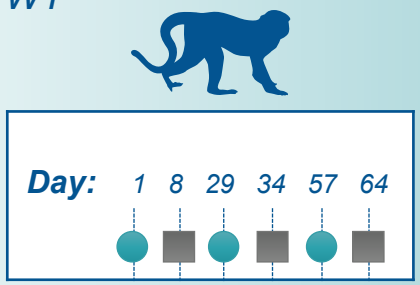
PepGen™

Source: https://www.cureduchenne.org/cure/exon-skipping/. * Comparative statements are based on cross-trial comparisons with publicly-available data for other exon skipping approaches that have been assessed following a single dose in humans.

Single-dose exon skipping levels for PGN-EDO53 almost 7X higher than for R6G-PMO53 comparator in NHPs

PGN-EDO53

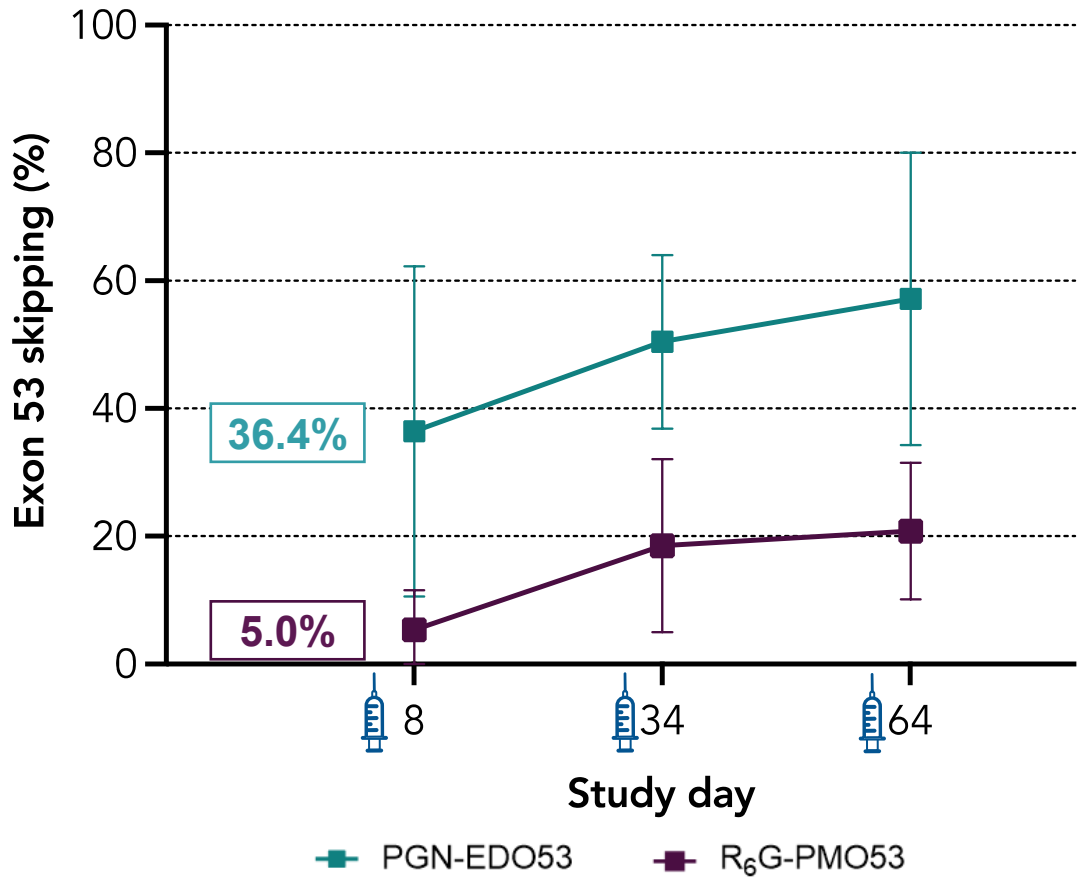
WT



PPMO dose (Q4W)

Tissue analysis

BICEPS (*30 mg/kg*)



PGN-EDO53 candidate nominated for development **outperformed R_6G-PMO53 comparator after single and repeat doses**

Protocol: PGN-EDO53 and R_6G-PMO53 were administered to NHP by IV infusion over 60 min (n=3). Q4W, three doses administered, PBS control. Biopsies taken 5 - 7 days after first and second administration; terminal samples collected 7 days after final dose. Study not powered for statistical significance. Data shown as mean ± SD; n = 3 per group. R_6G-PMO53 was selected as a relevant comparator PPMO approach.

Conclusion

Pepgen: Transformational technology & key clinical readouts in DMD and DM1 programs in 2024 with cash funding operations into 2025

		Key data read outs in 2024
PGN-EDO51 *DMD Exon 51*	**Highest level of single-dose exon skipping & oligo delivery in humans[1]**	• **Dystrophin, exon skipping** and safety data in DMD patients in mid-2024
PGN-EDODM1 *DM1*	**Differentiated approach with robust preclinical dataset**	• **Functional assessments, correction of mis-splicing,** safety data in DM1 patients
Preclinical Pipeline	• Five neuromuscular disease candidates in pipeline • Work underway to leverage EDO platform to expand to new tissues and new indications	

PepGen™

Note: Clinical plans are subject to alignment with regulatory authorities.
1. Comparative statements are based on cross-trial comparisons with publicly-available data for other exon skipping approaches that have been assessed following a single dose.