

The logo for Prosensa, featuring the word "PRO" in purple, a stylized yellow and orange wave graphic, and the word "ENSA" in purple.

PRO ENSA

Prosensa Webinar for Patient Groups

Leiden, January 21, 2014

Giles Campion, Chief Medical Officer

Forward-Looking Statements

This presentation may contain statements that constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are statements other than historical fact and may include statements that address future operating, financial or business performance or Prosensa’s strategies or expectations. In some cases, you can identify these statements by forward-looking words such as “may,” “might,” “will,” “should,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “projects,” “potential,” “outlook” or “continue,” and other comparable terminology. Forward-looking statements are based on management’s current expectations and beliefs and involve significant risks and uncertainties that could cause actual results, developments and business decisions to differ materially from those contemplated by these statements. These risks and uncertainties include, but are not limited to, the timing and conduct of clinical trials of drisapersen and Prosensa’s other product candidates, plans to pursue research and development of product candidates for DMD and other indications, the clinical utility of Prosensa’s product candidates, the timing or likelihood of regulatory filings and approvals, Prosensa’s intellectual property position, expectations regarding payments under Prosensa’s collaborations and Prosensa’s competitive position. These risks and uncertainties also include those described under the captions “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Prosensa’s Registration Statement on Form F-1 and other filings with the Securities and Exchange Commission. Forward-looking statements speak only as of the date they are made, and Prosensa does not undertake any obligation to update them in light of new information, future developments or otherwise, except as may be required under applicable law. All forward-looking statements are qualified in their entirety by this cautionary statement.

Introduction



Giles Champion –
Chief Medical Officer and
SVP R&D

What Will We Discuss?

- Agreement between GSK and Prosensa on transfer of rights
- Results from further analyses of the drisapersen data
- The potential for re-dosing boys
- Next steps
- Q&A session – e-mail questions to patientinfo@prosensa.nl

ProSensa Now Responsible

- ProSensa is 'well suited' to continue the development of drisapersen
- ProSensa will discuss with key stakeholders potential path forward
 - Patient groups
 - Clinical experts
 - Regulators
- ProSensa will assess feasibility and timing of possible re-dosing

Results of Drisapersen Analyses

- Since September 20, 2013, GSK and Prosensa initiated analyses
 - Phase III study, in context of other studies
 - Integrated analyses
 - Long term open label studies
 - Subsets of boys

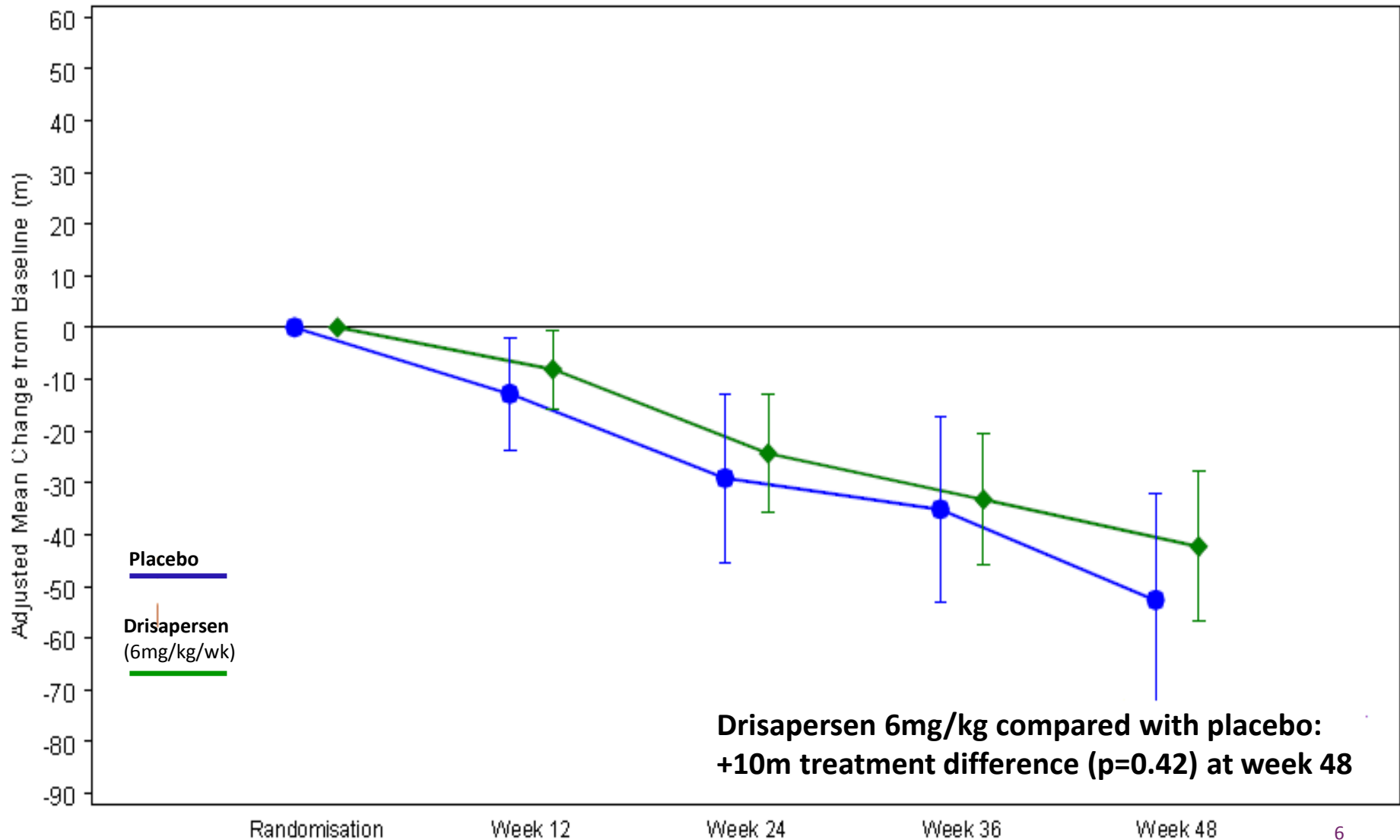
- Robust process, maintaining integrity of the database

- Support from patient groups, parents, experts, colleagues

- Work not yet complete, but preliminary conclusions emerge

Phase III Study - Results

Adjusted Mean Change from Baseline (95% CI) in 6MWD (MMRM Results)



Phase III Study - Conclusions

- Primary endpoint week 48: no statistically significant or clinically meaningful treatment difference (10.3m; $p=0.42$) over placebo in 6MWD
- No statistically significant or clinically meaningful treatment differences between drisapersen and placebo on the majority of secondary endpoints
- A statistically significant ($p<0.001$) decline in CK (creatine kinase), a potential marker of muscle cell damage, was observed at week 48 for the drisapersen group compared with placebo
- Pre planned subgroup ≤ 7 years showed a non statistically significant treatment difference of 21m

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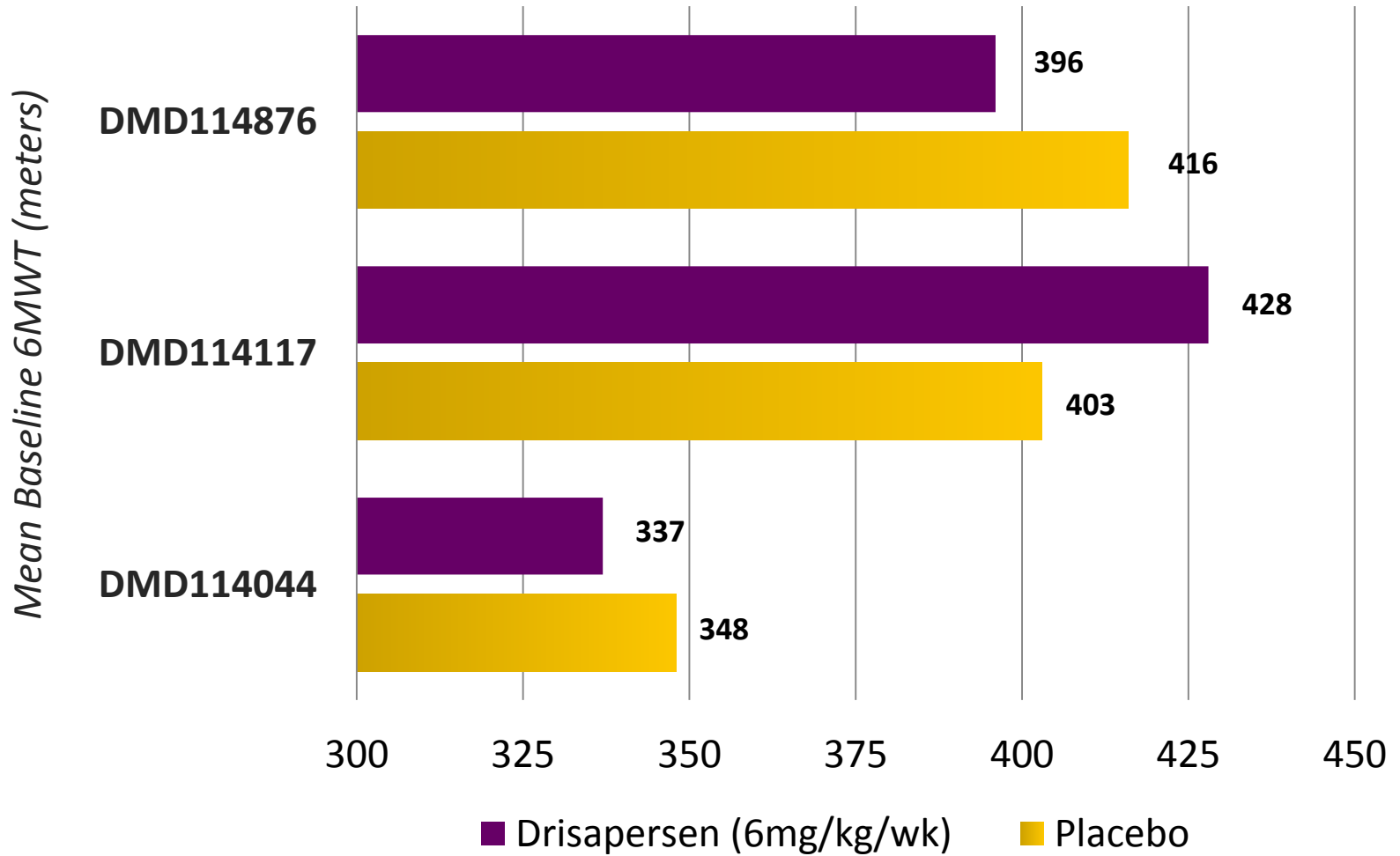
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- Boys in the phase III study were generally more advanced in their disease than in previous studies

Comparison of Boys Entering the Study

Study	Treatment drisapersen 6mg/kg/wk	Time since first symptoms (months), mean (sd)	Time since diagnosis (months), mean (sd)	Age (yrs), mean (sd), range
<i>DMD114876</i>	Placebo	57 (30)	46 (30)	8.0 (1.8) 5-11
	Drisapersen	59 (29)	47 (27)	7.6 (2.7) 5-13
<i>DMD114117</i>	Placebo	64 (24)	44 (22)	6.9 (1.2) 5-9
	Drisapersen	61 (25)	45 (28)	7.2 (1.7) 5-11
<i>DMD114044</i>	Placebo	67 (31)	54 (33)	8.0 (2.4) 5-16
	Drisapersen	72 (31)	58 (35)	8.3 (2.4) 5-16

Comparison of Mean Baseline 6MWD



Pooled Results - Preliminary Conclusions

- Pooling the results of the phase III study (DMD114044) with previous placebo controlled studies (DMD114117 and DMD114876)
 - No clinically meaningful difference, possibly due to large impact of phase III study
- Integrated analysis of two placebo controlled studies with similar boys enrolled
 - DMD114117 (DEMAND II) and DMD114876 (DEMAND V)
 - Clinically meaningful and statistically significant outcome

Long Term Open Label Trials

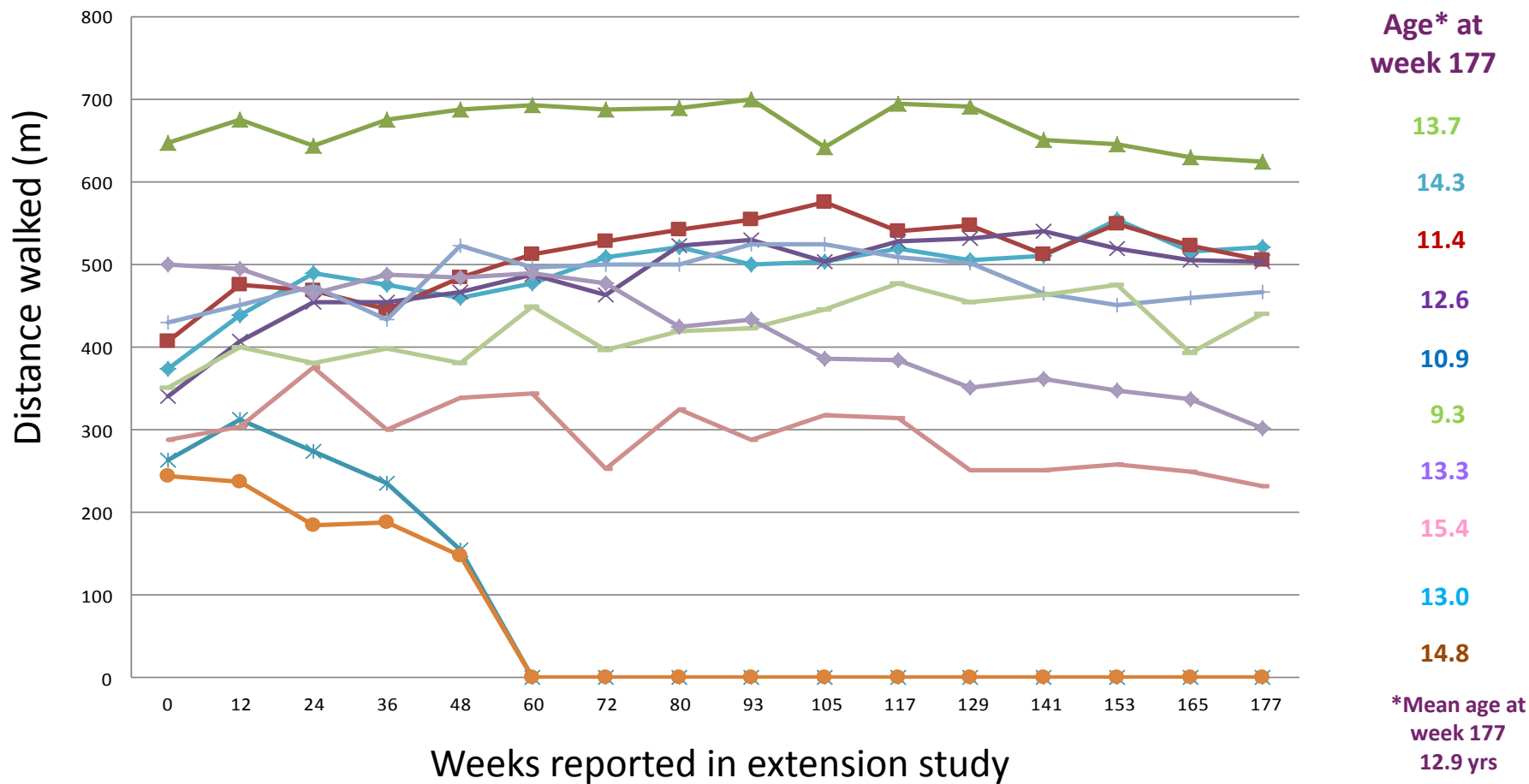
- DMD114673 - Extension study after initial dose finding study
 - 12 boys treated for > 4 years, results of 177 weeks

- DMD114349 - Extension study of DMD114044 and DMD114117 study
 - 96 weeks results available

DMD114673 - Results after 177 Weeks

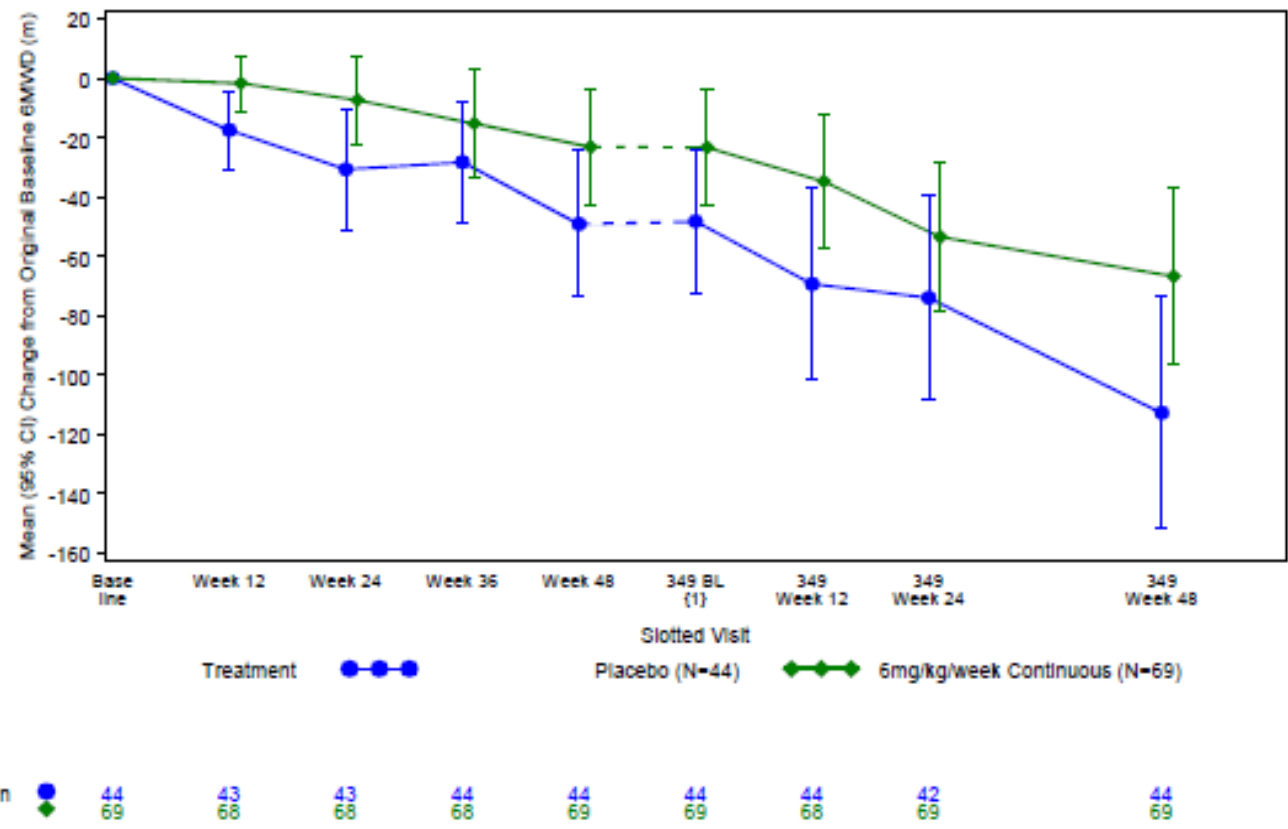


6MWD results for each boy in DMD114673



DMD114349 - Results after 96 Weeks

96 weeks from studies DMD114117 and DMD114044



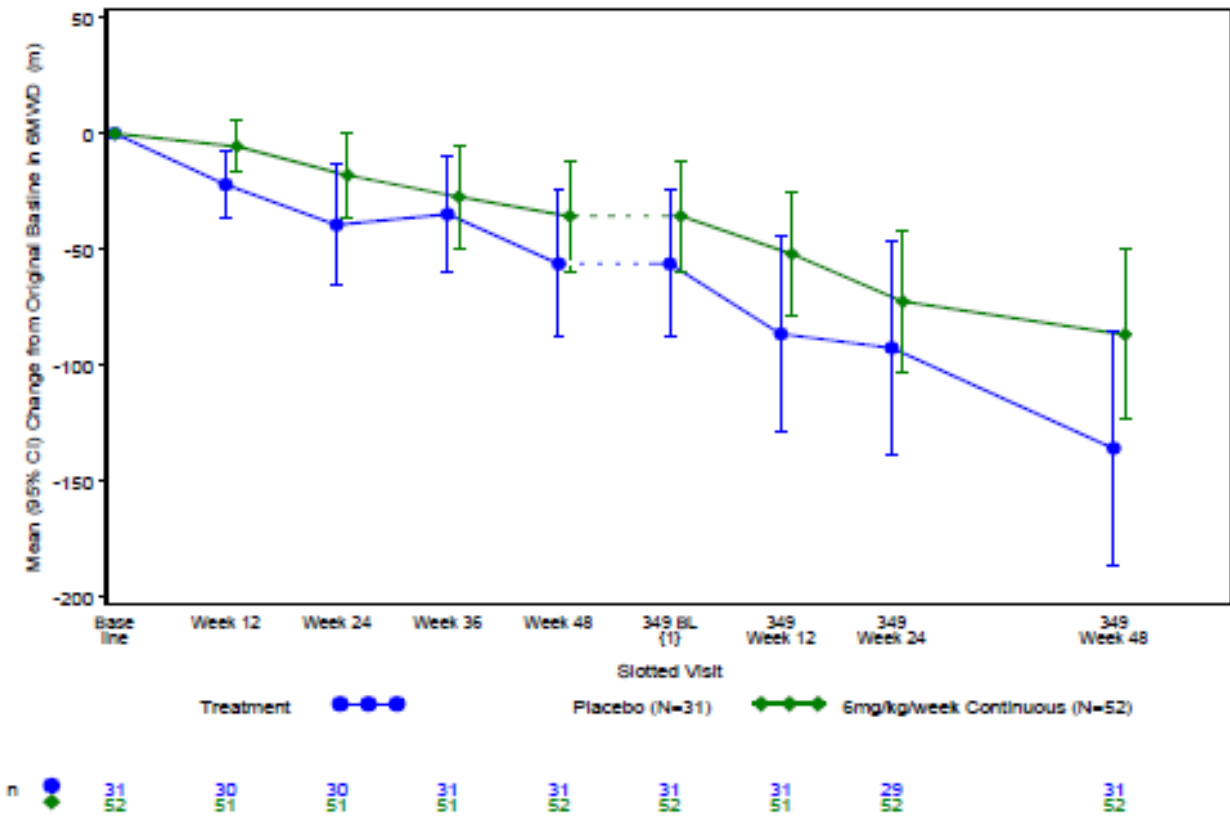
Mean changes from original baseline at DMD114349 week 48:

Placebo/Delayed:
 -113m (n=44)
 Continuous:
 -67m (n=69)

Treatment difference:
 +46m (n=113)

DMD114349 - Results after 96 Weeks

96 weeks from study DMD114044



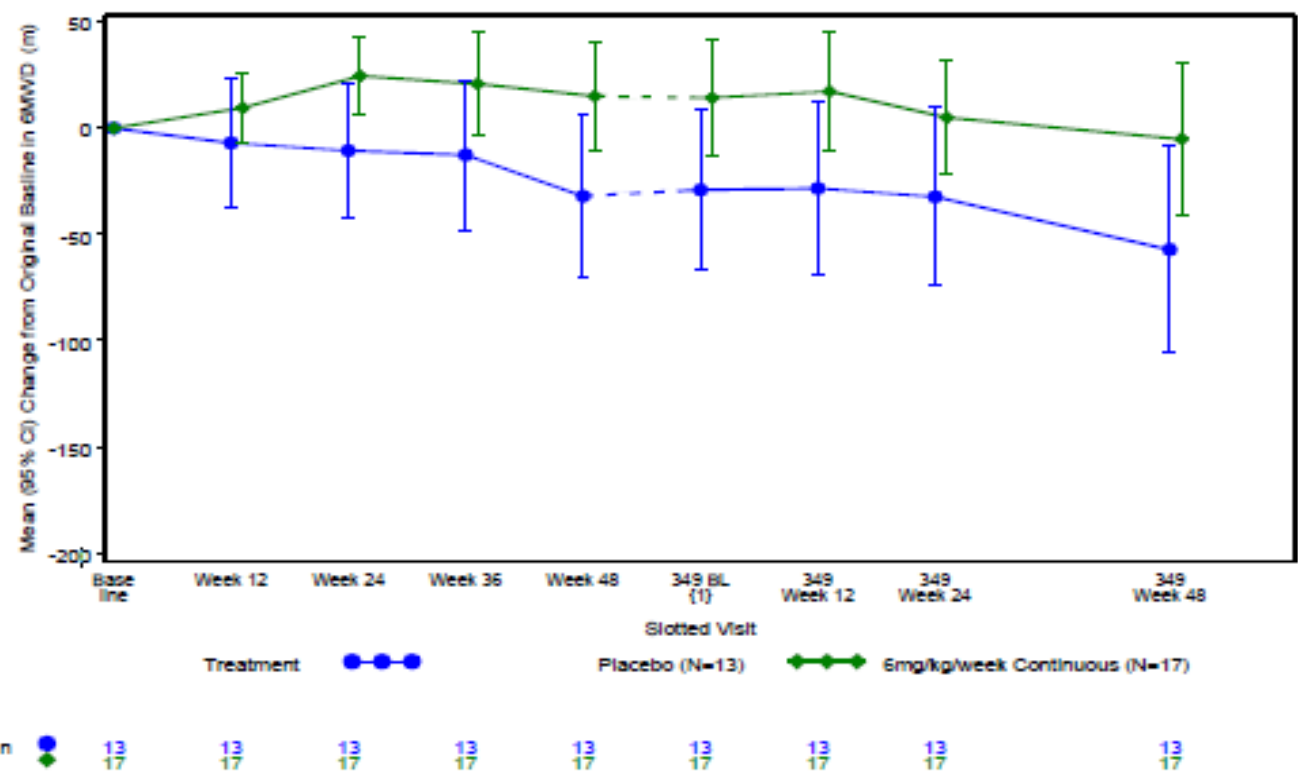
Mean changes from original baseline at DMD114349 week 48:

Placebo/Delayed:
 -136m (n=31)
 Drisapersen:
 -87m (n=52)

Treatment difference:
 +49m (n=83)

DMD114349 - Results after 96 Weeks

96 weeks from study DMD114117



Mean changes from original baseline at DMD114349 week 48:

Placebo/Delayed:
-57m (n=13)

Drisapersen:
-5m (n=17)

Treatment difference:
+52m (n=30)

Subset - Age ≤ 7 Years

Study	n	Week	Treatment difference	P-value
DMD114876	16	24	+31m	0.291
DMD114117	24	49	+38m	0.134
DMD114044	79	48	+21m	0.131
DMD114117 & DMD114044	103	48	+24m	0.048
DMD114349	52	96	+37m	NA

Subset - Age > 7 Years

Study	n	Week	Treatment difference	P-value
DMD114876	18	24	+28m	0.131
DMD114117	11	49	+56m	0.086
DMD114044	107	48	+7m	0.703
DMD114117 & DMD114044	109	48	+7m	0.670
DMD114349	61	96	+62m	NA

Key Safety Data

- Most relevant adverse events include
 - Injection site reactions,
 - Renal adverse events, including subclinical proteinuria, and
 - Thrombocytopenia
- Some of these events have been moderate to severe
- For more information on safety findings: www.gsk-clinicalstudyregister.com

Preliminary Efficacy Conclusions

- The data suggest that boys who are less progressed in their disease show a treatment difference on the six-minute walk test by 24 or 48 weeks
- The data suggest that longer treatment may be needed to show a treatment difference in more progressed boys
- These findings are preliminary and will be discussed with DMD experts

Sharing of Results

- Presentation in scientific meetings
- Publications in peer reviewed medical journals
- Relevant placebo data in drisapersen studies with scientific community
- Publication of dystrophin methodology and sharing with 'biomarker-group'

Natural History Study

- Observational study
- Up to 250 boys to be enrolled, over 150 boys participate so far
- Information on www.clinicaltrials.gov
- The study aims to:
 - characterize the natural history and progression of DMD
 - help inform the design of future studies
 - capture biomarkers of safety and disease progression
 - provide comparative data for the development of rare exons for which formal controlled trials are not feasible.

Re-dosing Possibilities

- Completion of analyses of drisapersen results across all studies
- Engagement with patient groups, clinical experts and regulators
- Possibilities for re-initiation of dosing will be assessed based on feedback from these stakeholders
- Until further notice, dosing of patients on hold; scheduled visits, safety monitoring and relevant assessments continue
- We realize all too well that this is a very difficult period for the boys and families who are waiting for a final decision and we will work as swiftly as possible

Impact on Other DMD Programs

- Ongoing studies continue
- Learning from drisapersen study results
- Based on outcome of full evaluation drisapersen, possible adaptation
- Currently too early to speculate about the impact on other compounds
- As soon as we have more clarity, we will provide additional information

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- ProSensa is committed to finding a solution for as many DMD boys as possible

Committed to DMD

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- We realize that the road towards access to a new orphan medicinal product for patients is often very difficult
- Given the unmet medical need and the severity of this disease, we feel obliged to explore all possibilities in depth and to leave no stone unturned
- We remain confident in our exon skipping technology are fully committed to bringing a treatment to Duchenne patients
- We will keep you informed

Thank You!



- We would like to thank all the boys that have participated or are participating in the Prosensa clinical programs
- We realize how much commitment and time to participate in a clinical study and how difficult this period is
- We would also like to thank the community at large for their input, confidence and patience
- If you would like to discuss the implications for your son, we recommend you to contact the treating physician
- Investigators have had separate briefings of this information
- Questions to Prosensa: patientinfo@prosensa.nl

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RNA modulation to fight Duchenne Muscular Dystrophy

