CONCLUSIONS

- Real-world studies in rare diseases, such as DMD, are key as they follow patients longitudinally post clinical trials, capturing valuable data on the patient journey and disease progression; notwithstanding, they are also prone to confounding factors, bias, and data missingness
- These interim results from the first real-world PMO registry indicate that eteplirsen was well tolerated in young patients (<7 years old) with DMD in routine clinical practice; an insufficient number of golodirsen- and casimersen-treated patients are enrolled for analysis to date
- Safety experience was consistent with the known safety profile of eteplirsen; there were no treatment-related discontinuations or treatment interruptions in patients <7 years old
- 3 SAEs were reported, none of which were determined to be treatment related
- Previous analyses have shown that eteplirsen is associated with significant and clinically meaningful delays in time to LOA; shorter follow-up and small sample size limited interpretation of age at LOA in this younger age cohort
- The safety and clinical outcomes of eteplirsen, golodirsen, and casimersen will continue to be evaluated in this ongoing study

RESULTS

- As of December 2021, 144 patients were enrolled in EVOLVE, with most patients (N=123) receiving eteplirsen
- Of the enrolled patients <7 years old, 30/32 (93.8%) are receiving eteplirsen, 1 (3.1%) is receiving golodirsen, and 1 (3.1%) is receiving casimersen; all 32 patients were ambulatory at PMO initiation
- To date, patients ≤7 years old received eteplirsen treatment for an average of 2.5 years in the youngest age group (<24 months) to 4.6 years in the oldest age group (≥48 months)
- Steroid usage before eteplirsen initiation was 0/3 (0%), 1/7 (14.3%), and 12/20 (60%) for the <24-, 24- to <48-, and 48- to <84-month-old groups receiving eteplirsen, respectively

Patient Characteristics

<table>
<thead>
<tr>
<th>Parameter*</th>
<th>&lt;24 Months (N=31)</th>
<th>≥24 to &lt;48 Months (N=96)</th>
<th>≥48 to &lt;84 Months (N=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eteplirsen</td>
<td>28/31 (90.3)</td>
<td>90/96 (93.5)</td>
<td>16/22 (72.7)</td>
</tr>
<tr>
<td>Goldirsen</td>
<td>3/31 (9.7)</td>
<td>6/96 (6.3)</td>
<td>6/22 (27.3)</td>
</tr>
<tr>
<td>Casimersen</td>
<td>0/31 (0)</td>
<td>0/96 (0)</td>
<td>0/22 (0)</td>
</tr>
</tbody>
</table>

Data are not final until study completion and database lock occur; values are mean (SD) unless otherwise noted. DMD = Duchenne muscular dystrophy; PMO = phosphorodiamidate morpholino oligomer.

Eteplirsen was well tolerated with no treatment-related discontinuations or treatment interruptions in this young cohort of patients

- 3 serious adverse events (SAEs) occurred in 2/30 (6.7%) eteplirsen-treated patients; all were determined to be unrelated to treatment
- There were no SAEs reported in either golodirsen- or casimersen-treated patients (0/2)

Summary of SAEs

- Port use was reported in the physician notes or AE listing in at least 20/30 (66.7%) eteplirsen-treated patients and both (100%) golodirsen- and casimersen-treated patients; patients as young as 1 year old have received a port
- As port use was not a mandatory collected observation, it may be an underestimate of port use in this population
- 13 patients experienced a total of 16 port-related AEs
- Of the 16 port-related AEs, 15 were considered related to PMO treatment (port placement, improper port position, and port malfunction); none were serious, and all were mild in severity
- There were no port-related infections related to treatment

The majority of patients initiating eteplirsen in this young cohort continue to be ambulatory to date

- The short follow-up and small size preclude accurate analysis of age at LOA in this age group
- In total, the ambulatory patients at PMO initiation, 31/82 eteplirsen-treated, 0/7 golodirsen-treated, and 0/2 casimersen-treated patients have since lost ambulation
- Of the 31 eteplirsen-treated patients who have lost ambulation, 5 initiated PMO treatment between 48 and 84 months; all other patients initiated eteplirsen at ≥7 years old
- The age at PMO initiation for those 5 patients was ~1 year later (median, 6.5 years) than those who remain ambulatory (median, 5.4 years) in the same age group (≥48 months)
- All 5 patients remained on PMO treatment after LOA

REFERENCES

5. Sarepta Therapeutics, Inc., and received research support as principal investigator from Capricor, PTC Therapeutics, Catabasis, Fibrogen, Santhera Pharmaceuticals, and Sarepta Therapeutics, Inc.
6. Received research funding from Genentech, received research support from Biogen and Novartis, served on advisory boards for Biogen, Optum, and Sarepta Therapeutics, Inc.
7. Received research support from Biogen, served on advisory boards for Biogen, Optum, and Sarepta Therapeutics, Inc.
8. Received research support from Biogen, served on advisory boards for Biogen, Optum, and Sarepta Therapeutics, Inc.
9. Received research support from Astellas/Mitobridge, Bristol-Myers Squibb, Capricor, Catabasis Pharmaceuticals, Cognetix Therapeutics, Eli Lilly and Company (formerly Conatus Therapeutics), Galapagos, Kala Pharmaceuticals, Novartis, Pfizer, PTC Therapeutics, Translarna, and Vifor Pharma and advising fees from Vifor Pharma.
Patient disposition

- Of the 144 patients initially enrolled, 32 patients were <84 months old at PMO initiation
  - 1 patient from the 48- to <84-month-old group receiving eteplirsen discontinued due to patient withdrawal