Dravet syndrome is a rare, severe, treatment-resistant, developmental epilepsy syndrome.

Current standard of care for Dravet syndrome is treatment with multiple antiepileptic drugs (AEDs), but 45% of patients continue to experience tonic-clonic seizures per month despite polytherapy.

Currently, there are no FDA-approved medications to treat seizures associated with Dravet syndrome.

**METHODS**

**Subjects**

- 106 Dravet syndrome patients 2-18 years old with a clinical diagnosis of Dravet syndrome and ≥1 tonic-clonic seizures per month despite polytherapy were randomized to 0.2 mg/kg/day, 0.8 mg/kg/day, or placebo.
- Exclusion criteria included: history of cardiovascular or cerebrovascular disease; concomitant treatment with anti-seizure activity or concomitant use of medications known to affect seizure frequency.
- Treatment withdrawal at 21 days post-screening.
- Any medical diagnosis that might alter risk-benefit ratio or impede participation in the trial.

**Study Design**

- Study 1: A 14-week, parallel group study comparing ZX008 (Fenfluramine HCl oral solution) to placebo.
- Study 2: A 28-day, open-label study comparing ZX008 (Fenfluramine HCl oral solution) to placebo.
- Patients were randomized to receive ZX008 0.2 mg/kg/day, ZX008 0.8 mg/kg/day, or placebo.
- Patients were randomized to treatment using a 1:1:1 ratio.

**Efficacy**

- **Study 1:** For the primary efficacy endpoint, a statistically significant reduction in seizure frequency during treatment compared with baseline was observed.
- **Study 2:** A statistically significant difference in seizure frequency during treatment compared with baseline was observed.

**Safety**

- No serious adverse events were reported.
- No cases of FDA-defined cardiac valvulopathy were observed.
- No new or unexpected cardiovascular findings were observed.

**CONCLUSIONS**

- ZX008 (Fenfluramine HCl oral solution) demonstrated a statistically significant reduction in seizure frequency compared with placebo in patients with Dravet syndrome.
- No new or unexpected cardiovascular findings were observed.
- No cases of FDA-defined cardiac valvulopathy were observed.
- No new or unexpected cardiovascular findings were observed.
- No new or unexpected cardiovascular findings were observed.

**REFERENCES**


**DISCLOSURE**

- Zogenix has a U.S. and international patent application portfolio, and each of its subsidiaries has a U.S. and international patent portfolio.
- Zogenix is the only U.S. company with a proprietary portfolio of drugs for the treatment of epilepsy.
- Zogenix is the only U.S. company with a proprietary portfolio of drugs for the treatment of epilepsy.
- Zogenix is the only U.S. company with a proprietary portfolio of drugs for the treatment of epilepsy.

**ACKNOWLEDGMENTS**

- Zogenix is grateful to all of the patients, their families, and the investigators involved in this study.
- Zogenix is grateful to all of the patients, their families, and the investigators involved in this study.
- Zogenix is grateful to all of the patients, their families, and the investigators involved in this study.
- Zogenix is grateful to all of the patients, their families, and the investigators involved in this study.

**Table 3. FDA Definition of Cardiac Valvulopathy**

<table>
<thead>
<tr>
<th>Value</th>
<th>Attributed</th>
<th>Treated</th>
<th>Non-Cardiovascular Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Cardiovascular Safety</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 8. Clinical Global Impression of Change (CGI-C) rated by parent/caregiver and investigator**

- CGI-C: 1-7
- CGI-C: 1-7
- CGI-C: 1-7
- CGI-C: 1-7

**Figure 7. Percentage of subjects who experienced seizure freedom or 1 seizure during the combined titration and maintenance period**

- Seizure freedom was a prespecified secondary endpoint. Evaluation of 0 or 1 seizure was not a primary analysis.
- Seizure freedom was a prespecified secondary endpoint. Evaluation of 0 or 1 seizure was not a primary analysis.
- Seizure freedom was a prespecified secondary endpoint. Evaluation of 0 or 1 seizure was not a primary analysis.
- Seizure freedom was a prespecified secondary endpoint. Evaluation of 0 or 1 seizure was not a primary analysis.