Zogenix Presents New Data from a Study Highlighting the Impact of Treatment with FINTEPLA® (Fenfluramine) Oral Solution on Dravet Syndrome Patients, Caregivers, and Families at Virtual AAN 2021

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- *Seizure Related Benefits noted by caregivers included reduction in frequency, fewer triggers causing seizures, and shorter recovery time when seizure did occur.*
- *Non-Seizure benefits most commonly noted include improvements in executive functions such as cognition, learning, and problem solving, as well as mood, sleep quality, and motor function.*
- *The majority of caregivers reported feeling less stress, anxiety, and depression, with 62% of employed parents missing less work.*

EMERYVILLE, Calif., April 16, 2021 (GLOBE NEWSWIRE) -- Zogenix (NASDAQ: ZGNX), a global biopharmaceutical company developing rare disease therapies, today announced new findings from an investigator-initiated study designed to assess caregivers' perspectives on the long-term seizure- and non-seizure-related benefits of FINTEPLA ® (fenfluramine) on patients with Dravet syndrome, a rare, severe epilepsy, and on their caregivers and families. Data from the study is being presented during the virtual American Academy of Neurology (AAN) Annual Meeting, April 17-22, 2021.

"The impact of Dravet syndrome on the lives of the diagnosed child and the family members who care and worry about their loved one can be severe and unrelenting," said Mark Jensen, Ph.D., Vice Chair for Research in Rehabilitation Medicine at UW Medicine, Professor of Rehabilitation Medicine at the University of Washington, and lead author for the study. "Our study shows that treatment with FINTEPLA not only reduces seizure activity, but also results in substantial benefits for many other aspects of the lives of those impacted by Dravet syndrome. The majority of caregivers reported that after treatment began, they felt less overwhelmed, less anxiety, and less stress. They noted improvements in sleep in both the child and themselves, and even noticed improvements in the siblings of the child with Dravet syndrome. As they witnessed these improvements, they experienced, for the first time in many years, hope for the future of their child."

Study Methodology
Caregivers of patients who received FINTEPLA through either the Phase 3 clinical trial program or the U.S. early access program were recruited to participate in one-on-one semi-structured interviews to discuss the benefits of fenfluramine for the child with Dravet syndrome, as well as the parents and the family as a whole. A total of 59 caregivers with a mean age of 48, 85% female, and 88% living with their partner or spouse participated in the interviews. Discussions were audiotaped and used to generate summaries which were analyzed to identify themes for responses. The numbers and rates of responses in each category were then computed (for example, responses about topics such as shorter post-seizure recovery time). Caregivers also provided demographic and clinical information about their child with Dravet syndrome and completed a self-report survey about their own health and quality of life.

Study Results
Of the participants interviewed, 34% were caregivers of adult patients with Dravet syndrome. Mean age of patients with Dravet syndrome was 15 years (range, 2-33 years) and they had been on the FINTEPLA treatment regimen for an average of 21 months (range, 5-59 months).

- The most commonly reported non-seizure-related improvements were in the areas of cognition (76%), alertness (68%), education (65%), problem solving (56%), speech (48%), sleep quality (47%), motor function (46%), and mood (41%).
- Caregiver parents themselves reported feeling less overwhelmed (71%), less stress (66%), and less anxiety and depression (68%). More than two-thirds reported that the quality of their sleep improved (71%) and they had more time to do things they enjoy (56%). In addition, 44% of parents reported that the relationship with their spouse or partner improved and 62% of employed parents missed less work.
- Reported family benefits included less family stress (76%), improved relationship between the Dravet syndrome child and their siblings (56%), improved behavior and/or mood of siblings (58%), and easier time for their family to do things with others (64%).

"In three Phase 3 studies, FINTEPLA has demonstrated the ability to provide transformational and durable seizure reduction for many Dravet syndrome patients whose seizures were not adequately controlled on their existing anti-epileptic medicines," said Bradley S. Galer, M.D., Executive Vice President and Chief Medical Officer at Zogenix and one of the study authors. "This qualitative study provides insight directly from caregivers about the real world benefits they observe in their children and family as

a result of their child being treated with FINTEPLA. These findings further support the data reported in our Phase 3 studies related to seizure and non-seizure outcomes."

The poster, titled "Caregivers' Perspectives on the Long-Term Seizure- and Non-Seizure-Related Benefits of Fenfluramine on Patients with Dravet Syndrome and Their Families" *(Amtmann, Salem, Gammaitoni et al)*, is also available on the Zogenix Newsroom.

About Dravet Syndrome
Dravet syndrome is a rare, devastating and life-long form of epilepsy that generally begins in infancy and is marked by frequent, treatment-resistant seizures, significant developmental, motor, and behavioral impairments, and an increased risk of sudden unexpected death in epilepsy (SUDEP). Affecting one in 15,700 live births in the U.S. and approximately one in 20,000 to 40,000 live births in Europe, most patients follow a course of developmental delay with cognitive, motor and behavioral deficits that persist into adulthood. Dravet syndrome severely impacts quality of life for patients, families and caregivers due to the high physical, emotional, caregiving, and financial burden associated with the disease.

About FINTEPLA® (fenfluramine) oral solution
FINTEPLA (fenfluramine) oral solution is approved in the United States, has received a positive CHMP opinion in Europe, and is in development in Japan for the treatment of seizures associated with Dravet syndrome, and is being investigated as a potential treatment for Lennox-Gastaut syndrome (LGS) and other rare and severe childhood-onset epilepsy disorders.

United States
IMPORTANT SAFETY INFORMATION
Boxed WARNING: VALVULAR HEART DISEASE and PULMONARY ARTERIAL HYPERTENSION

- **There is an association between serotonergic drugs with 5-HT2B receptor agonist activity, including fenfluramine (the active ingredient in FINTEPLA), and valvular heart disease and pulmonary arterial hypertension.**
- **Echocardiogram assessments are required before, during, and after treatment with FINTEPLA.**
- **FINTEPLA is available only through a restricted program called the FINTEPLA REMS.**

Contraindications
FINTEPLA is contraindicated in patients with hypersensitivity to fenfluramine or any of the excipients in FINTEPLA and with concomitant use of, or within 14 days of the administration of monoamine oxidase inhibitors because of an increased risk of serotonin syndrome.

WARNINGS AND PRECAUTIONS

Valvular Heart Disease and Pulmonary Arterial Hypertension (see boxed Warning)
Because of the association between serotonergic drugs with 5-HT2B receptor agonist activity, including fenfluramine (the active ingredient in FINTEPLA), and valvular heart disease and pulmonary arterial hypertension, cardiac monitoring via echocardiogram is required prior to starting treatment, during treatment, and after treatment with FINTEPLA concludes. Cardiac monitoring via echocardiogram can aid in early detection of this condition. In clinical trials of up to 3 years in duration, no patient receiving FINTEPLA developed valvular heart disease or pulmonary arterial hypertension.

Monitoring
Prior to starting treatment, patients must undergo an echocardiogram to evaluate for valvular heart disease and pulmonary arterial hypertension. Echocardiograms should be repeated every 6 months, and once 3-6 months post-treatment with FINTEPLA.

If valvular heart disease or pulmonary arterial hypertension is observed on an echocardiogram, the prescriber must consider the benefits versus the risks of initiating or continuing treatment with FINTEPLA.

FINTEPLA REMS Program (see boxed Warning)
In the United States, FINTEPLA is available only through a restricted distribution program called the FINTEPLA REMS program. Prescribers must be certified by enrolling in the FINTEPLA REMS program. Prescribers must Counsel patients receiving FINTEPLA about the risk of valvular heart disease and pulmonary arterial hypertension, how to recognize signs and symptoms of valvular heart disease and pulmonary arterial hypertension, the need for baseline (pretreatment) and periodic cardiac monitoring via echocardiogram during FINTEPLA treatment, and cardiac monitoring after FINTEPLA treatment. Patients must enroll in the REMS program and comply with ongoing monitoring requirements. The pharmacy must be certified by enrolling in the REMS program and must only dispense to patients who are authorized to receive FINTEPLA. Wholesalers and distributors must only distribute to certified pharmacies. Further information is available at www.FinteplaREMS.com or by telephone at 1-877-964-3649.

Decreased Appetite and Decreased Weight
FINTEPLA can cause decreases in appetite and weight. Decreases in weight appear to be dose related. Most patients resumed

the expected measured increases in weight by the end of the open-label extension study. Weight should be monitored regularly during treatment with FINTEPLA and dose modifications should be considered if a decrease in weight is observed.

Somnolence, Sedation, and Lethargy
FINTEPLA can cause somnolence, sedation, and lethargy. Other central nervous system (CNS) depressants, including alcohol, could potentiate these effects of FINTEPLA. Prescribers should monitor patients for somnolence and sedation and should advise patients not to drive or operate machinery until they have gained sufficient experience on FINTEPLA to gauge whether it adversely affects their ability to drive or operate machinery.

Suicidal Behavior and Ideation
Antiepileptic drugs (AEDs) increase the risk of suicidal thoughts or behavior in patients taking these drugs for any indication. Patients treated with an AED for any indication should be monitored for the emergence or worsening of depression, suicidal thoughts or behavior, or any unusual changes in mood or behavior.

Anyone considering prescribing FINTEPLA or any other AED must balance the risk of suicidal thoughts or behaviors with the risk of untreated illness. Epilepsy and many other illnesses for which AEDs are prescribed are themselves associated with morbidity and mortality and an increased risk of suicidal thoughts and behavior. Should suicidal thoughts and behavior emerge during treatment, consider whether the emergence of these symptoms in any given patient may be related to the illness being treated.

Withdrawal of Antiepileptic Drugs
As with most AEDs, FINTEPLA should generally be withdrawn gradually because of the risk of increased seizure frequency and status epilepticus. If withdrawal is needed because of a serious adverse reaction, rapid discontinuation can be considered.

Serotonin Syndrome
Serotonin syndrome, a potentially life-threatening condition, may occur with FINTEPLA, particularly with concomitant administration of FINTEPLA with other serotonergic drugs, including, but not limited to, selective serotonin-norepinephrine reuptake inhibitors (SNRIs), selective serotonin reuptake inhibitors (SSRIs), tricyclic antidepressants (TCAs), bupropion, triptans, dietary supplements (eg, St. John's Wort, tryptophan), drugs that impair metabolism of serotonin (including monoamine oxidase inhibitors [MAOIs], which are contraindicated with FINTEPLA, dextromethorphan, lithium, tramadol, and antipsychotics with serotonergic agonist activity. Patients should be monitored for the emergence of signs and symptoms of serotonin syndrome, which include mental status changes (eg, agitation, hallucinations, coma), autonomic instability (eg, tachycardia, labile blood pressure, hyperthermia), neuromuscular signs (eg, hyperreflexia, incoordination), and/or gastrointestinal symptoms (eg, nausea, vomiting, diarrhea). If serotonin syndrome is suspected, treatment with FINTEPLA should be stopped immediately and symptomatic treatment should be started.

Increase in Blood Pressure
FINTEPLA can cause an increase in blood pressure. Significant elevation in blood pressure, including hypertensive crisis, has been reported rarely in adult patients treated with fenfluramine, including patients without a history of hypertension. Monitor blood pressure in patients treated with FINTEPLA. In clinical trials of up to 3 years in duration, no patient receiving FINTEPLA developed hypertensive crisis.

Glaucoma
Fenfluramine can cause mydriasis and can precipitate angle closure glaucoma. Consider discontinuing treatment with FINTEPLA in patients with acute decreases in visual acuity or ocular pain.

Adverse Reactions
The most common adverse reactions (incidence at least 10% and greater than placebo) were decreased appetite; somnolence, sedation, lethargy; diarrhea; constipation; abnormal echocardiogram; fatigue, malaise, asthenia; ataxia, balance disorder, gait disturbance; blood pressure increased; drooling, salivary hypersecretion; pyrexia; upper respiratory tract infection; vomiting; decreased weight; fall; status epilepticus.

Drug Interactions
Strong CYP1A2 and CYP2B6 Inducers: Coadministration with rifampin or a strong CYP1A2 and CYP2B6 inducer will decrease fenfluramine plasma concentrations.

Consider an increase in FINTEPLA dosage when coadministered with rifampin or a strong CYP1A2 and CYP2B6 inducer.

Use in Specific Populations
Administration to patients with moderate or severe renal impairment or to patients with hepatic impairment is not recommended.

Please see full Prescribing Information, including Boxed Warning, for additional important information on FINTEPLA.

About Zogenix

Zogenix is a global biopharmaceutical company committed to developing and commercializing therapies with the potential to transform the lives of patients and their families living with rare diseases. The company's first rare disease therapy, FINTEPLA® (fenfluramine) oral solution has been approved by the U.S. FDA and the European Medicines Agency and is in development in Japan for the treatment of seizures associated with Dravet syndrome, a rare, severe lifelong epilepsy. The company has two additional late-stage development programs underway: one for FINTEPLA for the treatment of seizures associated with Lennox-Gastaut syndrome, another rare epilepsy, and one for MT1621, an investigational therapy for the treatment of a rare genetic disorder called TK2 deficiency (being developed through its subsidiary Modis Therapeutics). Zogenix is also collaborating with Tevard Biosciences to identify and develop potential next-generation gene therapies for genetic rare epilepsies.

Forward-Looking Statement

Zogenix cautions you that statements included in this press release that are not a description of historical facts are forward-looking statements. Words such as "believes," "anticipates," "plans," "expects," "indicates," "will," "intends," "potential," "suggests," "assuming," "designed," and similar expressions are intended to identify forward-looking statements. These statements include the potential that fenfluramine oral solution will be an important new treatment option for Dravet syndrome patients and Zogenix's plans to commercialize fenfluramine in Europe. These statements are based on Zogenix's current beliefs and expectations. The inclusion of forward-looking statements should not be regarded as a representation by Zogenix that any of its plans will be achieved. Actual results may differ from those set forth in this release due to the risks and uncertainties inherent in Zogenix's business, including, without limitation: Zogenix's ability to successfully launch FINTEPLA, including launching a controlled access program implemented due to risks related to valvular heart disease and pulmonary arterial hypertension; the COVID-19 pandemic may disrupt Zogenix's business operations, impairing the ability to commercialize FINTEPLA in Europe and Zogenix's ability to generate product revenue in Europe; Zogenix may not be successful in executing its sales and marketing strategy for the commercialization of FINTEPLA in Europe; unexpected adverse side effects or inadequate therapeutic efficacy of fenfluramine that could limit commercialization, or that could result in recalls or product liability claims; and other risks described in Zogenix's prior press releases as well as in public periodic filings with the U.S. Securities & Exchange Commission. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof, and Zogenix undertakes no obligation to revise or update this press release to reflect events or circumstances after the date hereof. All forward-looking statements are qualified in their entirety by this cautionary statement. This caution is made under the safe harbor provisions of Section 21E of the Private Securities Litigation Reform Act of 1995.

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