BACKGROUND

Introduction

- Despite the availability of several new antiepileptic medications (ASMs), approximately 30% of patients experience uncontrolled seizures. With each new ASM, the likelihood of achieving seizure control with each subsequent regimen decreases, 50-60% with the first ASM regimen, and 10-20% with the second, and 1% with the third.

X-TOLE is a novel, small molecule, selective XEN2D/STT7/KCC2 potassium channel opener being developed for the treatment of epilepsy. In the recently completed X-TOLE 2b clinical trial of the clinical efficacy, safety, and tolerability of XEN1101 administered as adjunctive treatment was evaluated in adults with focal epilepsy.

- Compared to other adult FOS clinical studies, X-TOLE included a "difficult-to-treat" patient population given the baseline seizure burden, number of prior failed ASMs, and number of concomitant ASMs during the study.

Key Inclusion Criteria

- Subjects were randomized for an 8-week, double-blind phase to one of three active treatment groups or placebo.
- Subjects had a median baseline monthly seizure frequency of at least 6
- Subjects took 2-5 ASMs at study entry, with 40.3% and 50.8% taking 2 and 3 ASMs respectively.
- The most common concomitant ASMs started and stopped prior to X-TOLE, with > 40% of subjects taking 3 concomitant ASMs; and median number of ASMs failed prior to study entry was 6.
- Sub-group analyses were performed to assess the role of disease severity in patients with differing baseline characteristics, number of prior failed ASMs, and disease severity during the study.

X-TOLE Study Design

- Subjects were randomized for an 8-week, double-blind phase to one of three active treatment groups or placebo.

Baseline Seizure Sub-Group Analysis

- Median monthly FOS reduction was >60% in subjects who failed ≤6 ASMs and 45.5% in subjects who failed >6 ASMs.

RESULTS

Efficacy Results: Median Percent Change (MPC) from Baseline

- These data are based on the primary efficacy analysis, which included all randomized patients who had at least one post-baseline efficacy assessment. The primary safety analysis included all randomized patients who had at least one post-baseline adverse event assessment.

CONCLUSIONS

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