EC PHARMACOLOGY AND TOXICOLOGY Special Issue - 2020

A Recently Approved Antiepileptic Drug For Resistant Local Seizures, Cenobamate

Dr. Amal M Mahfoz*

Department of Pharmacology and Toxicology, Faculty of Pharmacy, Modern University for Technology and Information, Egypt

***Corresponding Author:** Dr. Amal M Mahfoz, Department of Pharmacology and Toxicology, Faculty of Pharmacy, Modern University for Technology and Information, Egypt.

Received: February 12, 2020; **Published:** February 29, 2020

Abstract

Cenobamate, is a recently FDA approved antiepileptic drug for treatment of resistant focal epilepsy. Here I review the first published study of cenobamate for treatment of resistant focal seizures. The results declare that high doses produced high seizure-free rates. However, low tolerability at higher doses was observed. This means that further safety clinical studies are needed to ensure its clinical value.

Keywords: *Cenobamate; Antiepileptic Drug; FDA*

Cenobamate, a new anti-seizure drug has been approved by the FDA in 2019 for management of resistant types of local epilepsy. It acts as a sodium channel antagonist. The recent approval of cenobamate raises the query of whether this anti-seizure drug will differentiate itself from other previously approved drug, and who will benefit from it.

A little information about it is present in the published literature. A recent randomized controlled trial has been published [1]. 437 patients with resistant local epilepsy were assigned to take cenobamate (100 mg or 200 mg or 400 mg) or placebo for 2 months, then the dose increases to the target dose over 6 weeks and maintained on it for another 12 weeks. The results demonstrated that seizure frequency lowered by 35.5% in patients received the 100 mg dose of cenobamate; 55% in patients received the 200 mg and 400 mg doses. However, seizures decreased by 24% in patients received placebo.

Patients who are involved in this study have a high burden resistant seizure, However, the surprise is the number of patients with 75%, 90% or 100% reduction in seizure frequency. Cenobamate reduced seizure occurrence by ≥ 75% in 46% of patients who started with 400 mg and in 31% of patients who started with 100 mg. Seizure free period was achieved for 12-week maintenance period in 21% of patients got 400 mg and 4% in 100 mg.

These are promising results. However, we should concern the risks benefits ratio. The most effective dose (400 mg) was the least tolerated.

The company which manufactures cenobamate; SK Life Science implemented a large safety study on 1,300 patients. In that study no further cases of serious drug reactions with eosinophilia and systemic symptoms (DRESS) have been occurred [2].

Citation: Dr. Amal M Mahfoz. "A Recently Approved Antiepileptic Drug For Resistant Local Seizures, Cenobamate". EC Pharmacology and Toxicology SI.02 (2020): 01-02.

In conclusion, cenobamate carries substantial hope for patients with resistant seizures with a promising freedom from seizure if the greater dose is tolerated. However, more clinical exposures are obligatory to assure the safety profile of the drug.

Bibliography

1. Krauss GL., *et al*. "Safety and efficacy of adjunctive cenobamate (YKP3089) in patients with uncontrolled focal seizures: a multicentre, double-blind, randomised, placebo-controlled, dose-response trial". *Lancet Neurology* 19 (2019): 38-48.

2. Sperling M., *et al*. "Safety of cenobamate (YKP3089) as adjunctive treatment for uncontrolled partial seizures in a large, multicenter, open-label study". AES 2018 Annual Meeting Abstract Database [abstract 1.303] (2018).

Citation: Dr. Amal M Mahfoz. "A Recently Approved Antiepileptic Drug For Resistant Local Seizures, Cenobamate". EC Pharmacology and Toxicology SI.02 (2020): 01-02.