

Soluble Epoxide Hydrolase Inhibitors For The Treatment Of Arrhythmogenic Cardiomyopathy And Related Diseases

Tech ID: 33128 / UC Case 2021-605-0

ABSTRACT

Researchers at the University of California, Davis have developed an effective drug therapy, utilizing Soluble Epoxide Hydrolase (sEH) inhibitors, to prevent sudden death and treat the progression of myocardial dysfunction in patients with Arrhythmogenic Cardiomyopathy ("ACM").

FULL DESCRIPTION

ACM is a progressive myocardial disease characterized by fibrous and fatty deposits in the ventricular myocardium, which limit blood flow and can cause sudden death in severe cases. This sudden death syndrome has very few treatments, none of which treat the underlying condition. Currently, the only effective treatment available is an implantable defibrillator. This device can extend the life of patients, but it does pose serious risks and does nothing to treat the underlying heart muscle disease or prevent its progression. Additionally, drug therapy treatments are limited by their impact on a patient's immune system and most likely would require chronic administration. New approaches are necessary to limit the immunosuppressant properties of any potential drug therapy.

Researchers at the University of California, Davis have developed a novel and effective drug therapy utilizing sEH inhibitors that may provide a safe and effective long-term treatment for ACM. This new drug therapy has the potential to reduce the risk of sudden death and limit the progression of myocardial injury and dysfunction without significantly impairing a patient's immune system. This new drug therapy utilizes endogenous molecules to stimulate mechanisms that promote resolution of inflammation without compromising the immune system.

APPLICATIONS

- ▶ Reduce risk of sudden death and limit progression of ACM without impairing immune response

FEATURES/BENEFITS

- ▶ Treatment and prevention of underlying heart disease
- ▶ Limited impairment of immune system, making it a safe long-term drug therapy

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Published Application	20240024302	01/25/2024	2021-605

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OTHER INFORMATION

KEYWORDS

soluble epoxides hydrolase
inhibitor, arrhythmogenic
disease, cardiomyopathy,
epoxy fatty acids

CATEGORIZED AS

- ▶ **Medical**
 - ▶ Disease:
[Cardiovascular and Circulatory System](#)
 - ▶ New Chemical
[Entities, Drug Leads](#)
 - ▶ Therapeutics

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