A Novel Method To Enhance Tg6f Amelioration Of Dyslipidemia

Tech ID: 30002 / UC Case 2017-090-0

SUMMARY

UCLA researchers in the Department of Medicine have developed a novel protocol that enhances the effects of Tg6F in treating dyslipidemia.

BACKGROUND

Dyslipidemia is characterized as having abnormal levels of cholesterol or triglycerides in the blood, resulting in an imbalance of circulating lipids. Patients with dyslipidemia tend to have a higher risk for metabolic and inflammatory disorders, such as atherosclerosis. While the development of dyslipidemia is heavily influenced by diet and lifestyle, in some cases, genetic factors can also play a role. The most common medication to regulate dyslipidemia are statins, which inhibit the production of cholesterol. Statins have been shown to significantly reduce the risk of cardiovascular disease and are commonly prescribed to older patients by clinicians. However, their main function works to lower levels of low-density lipoprotein (LDL cholesterol). Other factors of dyslipidemia, such as reduced high-density lipoprotein (HDL cholesterol) and high levels of triglycerides, are not addressed, creating a need for a more global therapy option.

INNOVATION

UCLA researchers have developed a novel method to significantly enhance the effects of Tg6F on blood lipid and inflammatory metabolite levels. When Tg6F is prepared by this protocol and combined with the statin Ezetimibe, mice fed a high-fat Western diet had significant decreases in total cholesterol and triglyceride levels. Additionally, this treatment demonstrated a significant reduction in the levels of metabolites (HETEs) and lipoproteins (serum amyloid A) which participate in chronic inflammation and cancer.

APPLICATIONS

- Treatment of dyslipidemia, cancer, and other diseases involving chronic inflammation

ADVANTAGES

- Utilizes a safe, generic drug to enhance Tg6F effects
- Significantly reduces triglyceride levels and increases HDL levels
- Significantly reduces 5-HETE, 12-HETE, 15-HETE, and serum amyloid A levels

STATE OF DEVELOPMENT

- System has been tested and confirmed to work in mice

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	10,905,736	02/02/2021	2017-090

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OTHER INFORMATION

KEYWORDS

dyslipidemia, cardiovascular disease, inflammation, cholesterol, triglyceride, lipoproteins, metabolites, Tg6F, statins

CATEGORIZED AS

- **Medical**
  - Disease: Cardiovascular and Circulatory System
  - Therapeutics

RELATED CASES

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