

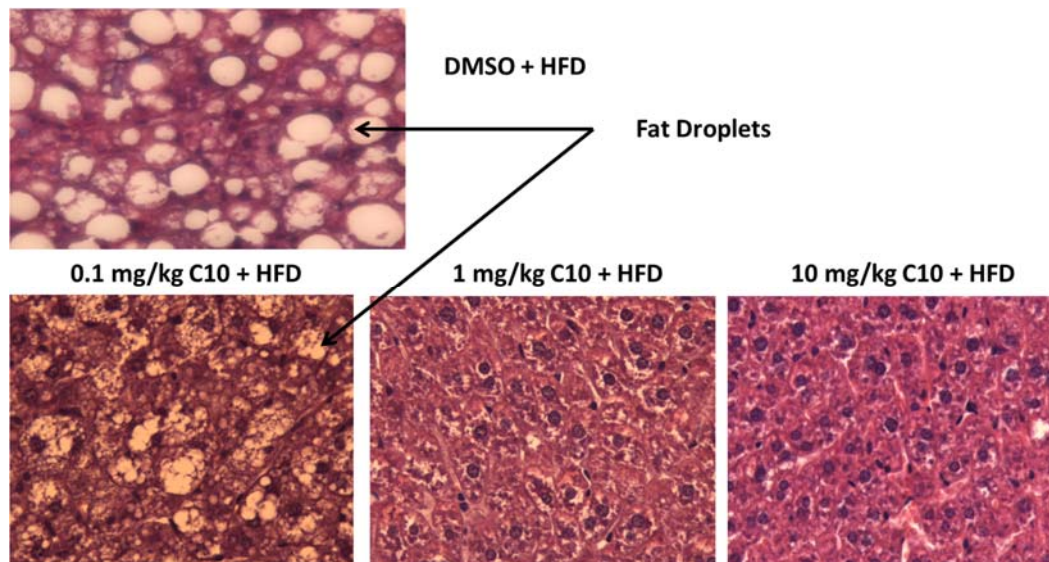
# TREATMENT OF NON-ALCOHOLIC FATTY LIVER DISEASE

OU ID: #14001, 14004, 14025

## Overview

Non-alcoholic fatty liver disease (NAFLD) is a disease of excess fat accumulation in the liver of individuals with no history of alcohol abuse which can lead to hepatitis, scarring, cirrhosis, and ultimately hepatic failure resulting in coma or death. It is the leading cause of liver transplantation and primary liver cancer in the U.S. The prevalence of NAFLD ranges from 10% to 24% in the general population and is associated with obesity, type 2 diabetes, and metabolic syndrome. Fatty liver disease (FLD) is observed in up to 75% of obese people, and 35% of those individuals will progress to NAFLD. Treatment consists of weight loss, fat restricted diet, and lipid lowering medications. Currently there are no treatments that target the progressive hepatic inflammation seen in NAFLD.

This invention presents a novel group of compounds that could be developed into the first targeted therapy for NAFLD, shifting the treatment paradigm from managing the co-morbidities to treating the disease itself.



## Benefits

- Inhibitors decrease the production of multiple inflammatory cytokines and prevent obesity-induced NAFLD
- Targets the primary disease, not the diseases and conditions associated with NAFLD



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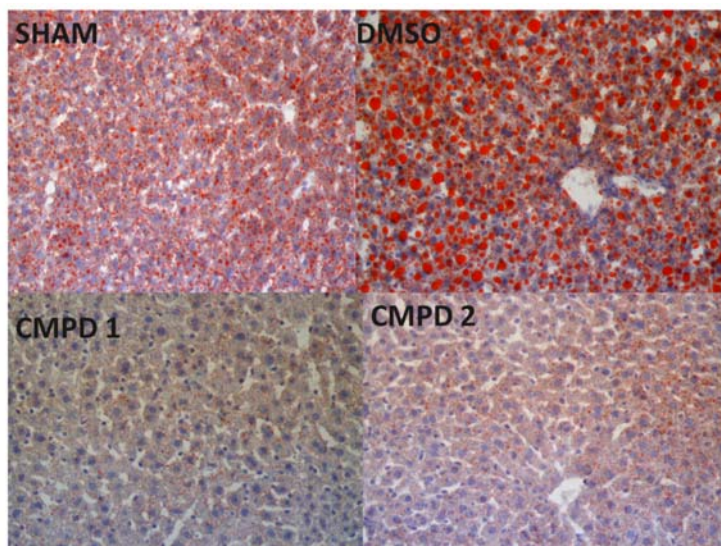
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## Commercial Application

This group of compounds possesses significant potential value. While there are medications approved for treating diseases and conditions associated with NAFLD, there are currently no medications specifically approved for the treatment of NAFLD itself. As a result, treatment protocols are focused on the associated co-morbidities. In addition, many of the medications employed to treat conditions associated with NAFLD are hepatotoxic themselves. Thus, there is a significant unmet need for medications to treat NAFLD.

Ohio University is currently pursuing patent applications to protect both the composition of matter for these compounds as well as their use in treating NAFLD.



## About the Inventors

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