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Combination of Cholesterol Esterification Inhibitors with Existing Therapies for Cancer Treatment

Applying an agent that inhibits cholesterol esterification can resensitize drug-resistant cancer cells when used in conjunction with existing treatments.

Despite recent advancements in cancer treatment, drug resistance remains a major impediment to developing successful control or cure for cancer. Numerous attempts have been made to decipher the mechanisms underlying cancer resistance, but none have attacked the issue regarding the role cholesterol metabolism plays.

Purdue University researchers found an unexpected accumulation of cholesteryl ester in aggressive types of cancer. Their research has shown that applying an effective amount of at least one agent to an existing cancer treatment resensitizes the cancer cells to the existing cancer treatment by inhibiting cholesterol esterification pathways.

Advantages:

-Targets the metabolic pathway to overcome drug resistance

-Works in conjunction with existing therapies

Potential Applications:

-Cancer treatment

-Drug resistance diseases

-Therapeutics

TRL: 3

Intellectual Property:

Technology ID
2017-CHEN-67647

Category
Biotechnology & Life Sciences/Biomarker Discovery & Diagnostics
Pharmaceuticals/Drug Discovery & Development

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View online

Provisional-Patent, 2016-10-03, United States | PCT-Patent, 2017-10-02, WO | NATL-Patent, N/A, United States

Keywords: Cancer treatment, drug resistance, cholesterol metabolism, cholesteryl ester, inhibiting cholesterol esterification, cancer therapeutics, metabolic pathway, existing therapies, aggressive cancer types, resensitize cancer cells, Cancer, Cancer Therapy, Chemistry and Chemical Analysis, Drug Resistance, Medical/Health, Therapeutics, Therapy