

Drug-Resistant Cancer Therapeutics with 2-Aryl-2-(3-Indolyl) Acetohydroxamates

Challenge

According to the World Health Organization, in 2020, cancer was the leading cause of death - corresponding to nearly 10 million or one (1) in six (6) deaths world-wide. Cancer can occur in different parts of the body - some cancers are intrinsically drug-resistant and some quickly become drug-resistant to even the front-line therapies. Novel anticancer agents are needed to overcome these intrinsic or developed tumor resistance.

Solution

Newly developed therapeutics to overcome drugresistant mechanisms of cancer cells and promote cancer cell differentiation into non-proliferating "normal-like" cells.

Benefits and Features

- Novel chemotype to treat multi-drug resistant cancers
- Compounds formulated into pharmaceutical compositions
- Orally bioavailable compounds with initial testing in mammalian animal models

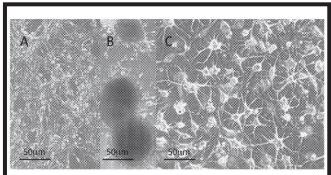


Figure 5. Redifferentiation of growth-inhibited malignant U87 cells to an astrocytic phenotype.

(A) Three day old glioblastoma cancer cells. (B) Untreated, these grow into mini-tumors during the following three days. (C) After a 33-day treatment with 7 µM 3aafa.

Market Potential / Applications

This invention can be used to develop clinical drugs or in partnership with a pharmaceutical drug company

Developments and Licensing Status

Status: Available

Commercial sponsor sought? Yes

Patent Status

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