

Compounds That Target Drug-Resistant Cancer Cells

Challenge

Most known cancer treatment methods (such as chemotherapy and biological-targeted therapies) target cellular pathways that lead to cell death. However, multiple mechanisms such as mutations permit cancer cells to evade these therapies. Cancers such as glioma, lung cancer, prostate cancer and uterine sarcoma particularly become quickly drug-resistant; at that point, their treatment is dramatically more complex and less successful. The development of drugs which work against multi-drug resistant cancers is essential.

Solution

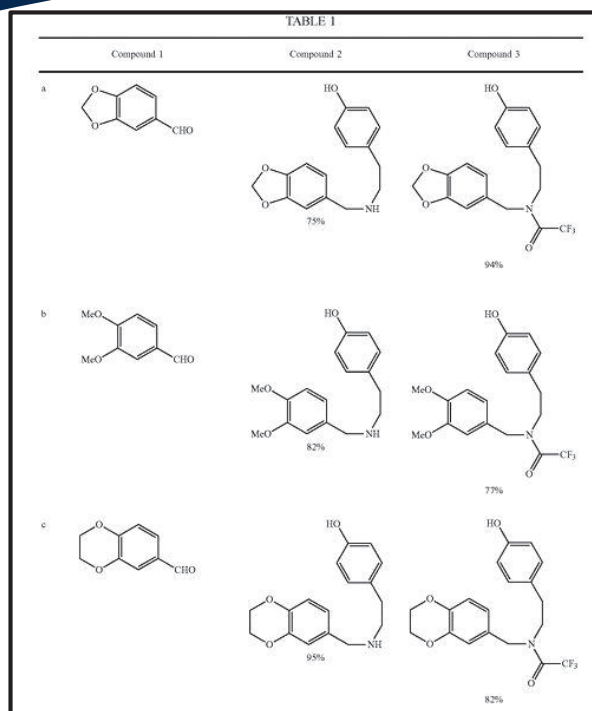
Novel compounds that work against multi-drug-resistant cancers and inhibit the growth of tumors.

Benefits and Features

- Provides innovative therapeutics for control of cancer cell proliferation.
- Works against drug-resistant cancers.

Market Potential / Applications

This invention has applications for medical research centers and in the pharmaceutical industry to develop new drugs for drug-resistant cancers.



Developments and Licensing Status

Status: Available

Commercial sponsor sought? Yes

Patent Status

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Keywords: Cancer, metabolic pathways, apoptosis, metastasis, necrosis, proliferative inhibition

Relevant Paper:

Henry, S. et al., 5, 10b - Ethanophenanthridine amaryllidaceae alkaloids inspire the discovery of novel bicyclic ring systems with activity against drug resistant cancer cells. *European Journal of Medicinal Chemistry*. 120 (2016) 313-328.

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