

TECHNOLOGY OFFER

ALICHONDRICHLORIN FOR USE IN TREATING CANCER

Background

Cancer remains one of the leading causes of morbidity and mortality worldwide, representing a significant global health burden.

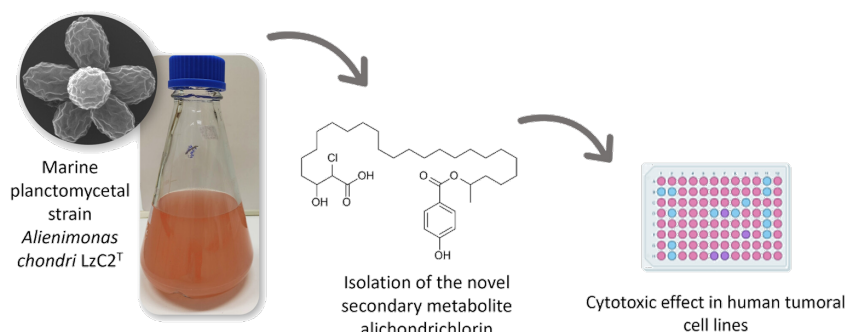
The discovery of new anticancer compounds that are both effective and safe continues to be challenging, as many existing therapies show limited efficacy or cause significant toxicity. There is a demanding need for novel molecules with selective activity and improved therapeutic profiles.

Technology

This invention introduces alichondrichlorin, a novel chlorinated secondary metabolite isolated from the marine planctomycete *Alienimonas chondri*.

The compound shows potent, selective cytotoxic activity against multiple human cancer cell lines, including breast adenocarcinoma (MCF-7) and hepatocellular carcinoma, while sparing non-tumour human cells (THLE-2).

The patent further covers pharmaceutical compositions, therapeutic uses, and methods of treatment employing alichondrichlorin or pharmaceutically acceptable derivatives.



Advantages

- Strong selective cytotoxicity toward cancer cells;
- Low-micromolar potency across multiple tumour cell lines (MCF-7, HepG2, A2058).
- Novel marine-derived chemical scaffold;
- Potential to overcome resistance to conventional chemotherapy agents.
- Applicable in both human and veterinary oncology.

PATENT STATUS

International Patent Application
via PCT WO2025224674
Priority date: 24.04.2024
Pending in Europe, China and US

DEVELOPMENT STAGE

TRL 3 – Experimental proof of concept

APPLICATIONS

Anticancer compound for human and veterinary applications.

COOPERATION

Research Cooperation Agreement;
Licensing Agreement.

KEYWORDS

Alichondrichlorin
Anticancer
Pharmaceutical
Veterinary
Natural Product

DEVELOPED BY

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