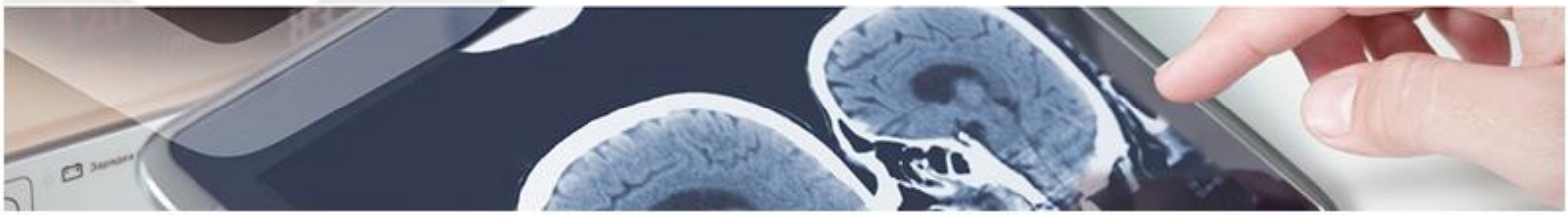
Biotech-Pharma (Therapy)

Antitumor Gene therapy: combination of suicide genes therapy to increase bio-efficiency

A research group from the Andalusian Public Health System has developed a gene therapy with the aim of inducing a change in the intracellular gene expression pattern, thereby initiating the phenomenon of cell death and, consequently a reduction of tumor malignancy, specifically in colon cancer.

Oficina de TRANSFERENCIA DE TECNOLOGÍA
Sistema Sanitario Público de Andalucía



Description

Colon cancer is the third most common cancer in men and the second in women; 500.000 people worldwide die every year due to this disease. Gene therapy is considered one of the most promising strategies for the development of new treatment options.

There are some therapy options which can separately contribute to the treatment. Nevertheless, it would be necessary to obtain a gene therapy option based on a suitable combination of different genes in order to increase the effects.

A research group from the Andalusian Public Health System has developed a gene therapy based on recombinant plasmids capable of transfecting tumor cells with 'gef' gene (bacterial origin) and apoptin (viral origin). The aim of this technology is to induce a change in the intracellular gene expression pattern, thereby initiating the phenomenon of cell death and, consequently a reduction of tumor malignancy, specifically in colon cancer.

Advantages

1. Non-transfected cells with the 'gef' gene have a higher proliferation rate than cells transfected with genes separately.
2. The combination of apoptin and gef gene has a greater cytotoxic effect than the therapy with separated genes.

Intellectual Property

This technology is protected by patent.

Aims

The group is looking for a license agreement holding and/or collaboration.

Classification

Area: Therapy
Technology: Gene Therapy
Pathology: Oncology and Hematology / Digestive System

JUNTA DE ANDALUCIA
CONSEJERÍA DE IGUALDAD, SALUD Y POLÍTICAS SOCIALES

FIBAO
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C/ Dr. Azpitarte, 4, 4ª planta. Edificio Licinio de la frente 18012 .Granada
+34 958 020 245 MÓVIL +34 608 376 697 pablo.alvarez.exts@juntadeandalucia.es