

Therapy

Cell therapy for striated muscle regeneration.

Research groups from the Andalusian Public Health System and the Biomedical Research Institute of Malaga, in collaboration with a group from the Sanitary Research Institute Bionostia, have identified a new cell type with striated muscular regeneration capacity using multipotent precursor cells obtained from the cremaster muscle.

Oficina de
**TRANSFERENCIA
DE TECNOLOGÍA**
Sistema Sanitario Público de Andalucía



Description

Cell therapy appears as a great opportunity for degenerative diseases and regeneration of skeletal muscle.

The most important feature is to obtain human cells with **myogenic capacity**, this capacity is based in generating skeletal muscle and avoids rejection due to the fact it can be transplanted in an autologous way, this will suppose a greater progress for the specific treatment of the above-mentioned diseases.

The research group has developed a new therapeutic product using multipotent precursor cells (myogenic, vascular and neural type cells). In addition, it could also be valid for any pathology related to a susceptible striated muscle regeneration, as well as characterized by the progressive degeneration of skeletal muscle. **This treatment could be used, among others, in degenerative pathologies such as muscular dystrophy, urinary incontinence or anal incontinence.**

The cremaster muscle is a densely innervated vestigial striated muscle, which has numerous motor plates. Obtaining this muscle through a biopsy does not imply a functional damage in the patients, being an advantage also in the patients with muscular dystrophy when using a donor source with little possibility of degeneration.

The experimental methodology is reproducible, and obtains excellent results with clinical utility in myogenic regeneration.



Advantages

- The chosen myogenic cells have **excellent capacity for the formation of skeletal muscle fibers**, useful in any pathology that needs regeneration.
- **This is a safe technique, presenting good results and without generating rejection** when cells are used autologously.
- **It could be used as a single treatment or combined with other medical devices** (meshes, slings, etc ...).
- It is **especially useful in diseases related to progressive muscle degeneration**, where there is a need for curative treatments or to improve their effectiveness



Industrial Property

This technology is protected by national and international patent application with possibility of national phase entry.



Aims

The research group is looking for partnership and/or license agreement.



Classification

Area: Biotech - Farma (Therapy).

Pathology: Musculoskeletal disorders / Genetic and rare diseases / Others (Urinary / fecal incontinence).



http://www.ibima.eu/grupo_investigacion/unidad-ibima-cnio-de-tumores-genitourinarios/