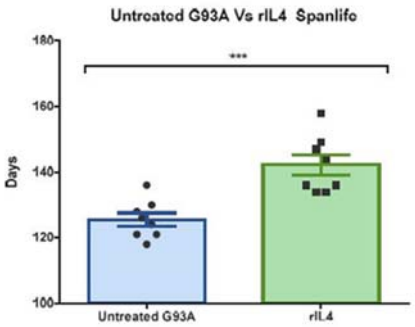
HEALTH, PHARMA, DRUGS, RARE DISEASES

Treatment with a solution which containing interleukin-4 polypeptide (IL4) to treat of Amyotrophic Lateral Sclerosis



BUSSINESS OPORTUNITY

Technology available for licensing

IP STATUS

PCT application - PCT/ES2017/070096

TAGS

Amyotrophic Lateral Sclerosis (ALS), Muscular Paralysis, Interleukin-4 polypeptide, Neurodegenerative Disorder

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TREATMENT AND PREVENTION OF AMYOTROPHIC LATERAL SCLEROSIS

SUMMARY

ALS is devastating neurodegenerative disorder. It's a debilitating and life-threatening disease because of the gradual loss of function and its paralyzing effect on muscles used for breathing, which usually leads to death from respiratory failure. The average life expectancy of ALS patients after diagnosis is between 2-5 years.

THE TECHNOLOGY

The invention relates to an interleukin 4 polypeptide, or a nucleic acid encoding said interleukin 4 polypeptide, or a cell expressing said polypeptide, for **use in the prevention and/or treatment of amyotrophic lateral sclerosis**.

NEED

Currently, there is no cure for ALS. There only exist two approved ALS medicine: riluzole (Rilutek®), modestly slows the progression of the disease in some people and the recently approved edaravone (Radicava®) reduces the rate of functional decline in these patients. Treatments focus on the alleviation of symptoms, and possibly slowing down the rate of ALS progression.

THE MARKET

ALS cases across the globe will increase 69% from actually to 2040. This increase is predominantly due to ageing of the population, particularly among developing nations. More than 6,000 people in the US are diagnosed with ALS each year, according to the ALS Association, and it is estimated that ALS affects 1 in 10,000 people in the European Union.

ADVANTAGES

The IP administration of rIL4 for ALS, is able to:

- **Prolong survival**
- **Delay the manifestation of the most apparent symptoms** of the disease
- Improve the clinical course of the disease **attenuating body weight loss**
- **Improve the motor behaviour**

APPLICATIONS

With the main aim to minimize or erase the progression of ALS, the goal would be to develop a more effective therapeutic treatment than those currently available. Our solution could be also developed as a combination product with other therapeutic agents showing promising outcomes.

LEVEL OF DEVELOPMENT

Proof-of-concept phase: Non-regulatory preclinical tests have been developed in animals at P30 and P50 stages, under several routes of administration.