

DULOXETINE FOR THE EFFECTIVE TREATMENT OF DEGENERATIVE RETINAL DISEASES

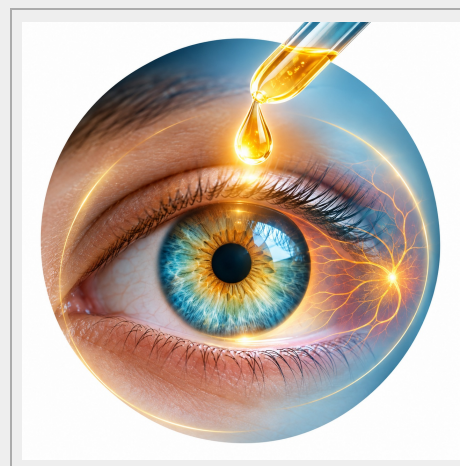
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RESUMEN

Researchers at the University of Alicante, in collaboration with the Teófilo Hernando Foundation, have described, in a mouse model that replicates retinitis pigmentosa, a new use for the drug duloxetine in the treatment and prevention of degenerative retinal diseases. Conditions such as retinitis pigmentosa, central areolar choroidal dystrophy, glaucoma, diabetic retinopathy, macular degeneration and retinopathy associated with both Alzheimer's disease and Parkinson's disease could potentially benefit from this treatment.

Pharmaceutical companies interested in supporting the development of further studies, as well as its commercial exploitation, are sought.

**INTRODUCCIÓN**

Eye diseases that lead to retinal degeneration (such as glaucoma, age-related macular degeneration, diabetic retinopathy, retinitis pigmentosa, central areolar choroidal dystrophy, and retinopathies associated with Alzheimer's and Parkinson's diseases, amongst others) usually result in serious vision problems, and in many cases to blindness, which has a significant social, health and economic impact, resulting in a very poor quality of life for patients.

Although these diseases have different causes (genetic defects, increased intraocular pressure, high blood glucose levels, stress or ageing), the mechanisms of response to injury at the cellular and molecular levels are similar across all of them. All these factors frequently induce a set of cellular signals that lead to well-established and similar morphological and functional changes, such as programmed cell death and retinal remodelling.

Cell death in specific degenerative retinal diseases and in other neurodegenerative diseases (such as Alzheimer's and Parkinson's diseases, amongst others) does not differ significantly; consequently, the pharmacological targets under investigation are similar in both types of disease.

Current treatments are of limited effectiveness and fail to halt the progression of these diseases; hence the need to provide more effective drugs to treat retinal degeneration that are capable of delaying, preventing and even reversing photoreceptor degeneration and the resulting loss of vision.

SECTORES DE APLICACIÓN (3)

Molecular Biology and Biotechnology
Pharmacology, Cosmetics and Ophthalmology
Medicine and Health

