The Realisation of Research

Retinal Ganglion Cell Replacement Therapy

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Category(s):
Gene/Cell Therapy

Description:

Neural and Retinal Stem Cell Integration Technology

Available For: Exclusive licensing

Summary

Transplantation of neural/retinal stem cells into the sub retinal space has had mixed results due to ineffective migration and integration of stem cells. Microglia have been identified as a barrier to successful cell transplantation into the retina. These cells engulf transplanted cells and produce chondroitin sulphate proteoglycans (CSPGs) which prevent neurite outgrowth.

The Technology and its Advantages

We have developed a combination treatment to inhibit microglia when transplanting retinal stem cells: This therapeutic combination greatly improved migration of grated stem cells into the retina as well as reduced microglia infiltration within the transplanted retina.

This treatment would be applicable for numerous eye diseases, such as, Age-related Macular Degeneration, Diabetic Retinopathy, Retinitis Pigmentosa and Glaucoma.

Market Opportunity

For Glaucoma alone, the forecast of prevalence across the 5 major European countries, the US and Japan is set to rise from $15m in 2010 to $15.7 by 2014 (Business Insights). These figures do not include high incidence of glaucoma in India and China. In 2008 the sales of anti-glaucoma in India and China. In 2008 the sales of anti-glaucoma preparations by the 10 leading companies in the market was $5.2m and showed a growth of 11% for the period 2007-08.

Intellectual Property Status

Patented Technology.

Further Information

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