

A Systems Biology Study on the Retina Tissue Engineering Involved Growth Factors

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Abstract

In order to find out the most effective growth factors in retina tissue engineering, a systems biology study was performed. This study demonstrates the importance and preview of the 21 proteins that plays different roles in retina regeneration. In fact, based on tissue Engineering's three major components (cell, scaffold & growth factor), we have to know the exact role of each one. For any engineered tissue fabrication, these three parts is needed.

In this work, a Gene Ontology analysis in addition to a degree centrality analysis, show the most effective growth factors in Retina Tissue Engineering.

Keywords

Retina Tissue Engineering, Systems Biology, Gene Ontology, Growth Factor