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In Vitro Model for Fuchs Endothelial Dystrophy (FED) and its effect on Cornea Endothelial Cells

The cornea is the window that provides human vision. The transparent cornea may be affected by several diseases and traumas that could cause vision damage and even blindness. And one of the specific interests is Fuch's endothelial dystrophy. This particular disease is caused by the formation of a "guttata" structure on the Descemet membrane, which will lead to cell death and eventually by dysfunctional endothelium. Therefore, a disease model simulating the FED and Guttata is essential. The previous works have focused on the apoptosis assay and cytoskeletal markers of the B4G12 cells on the FED disease model. Future works involve further validation of the assays and Histology slides preparation.