

## STORAGE OF OCULAR CELLS AT ROOM TEMPERATURE

**Purpose** – Investigate feasibility of preserving primary human ocular cells in ambient conditions.

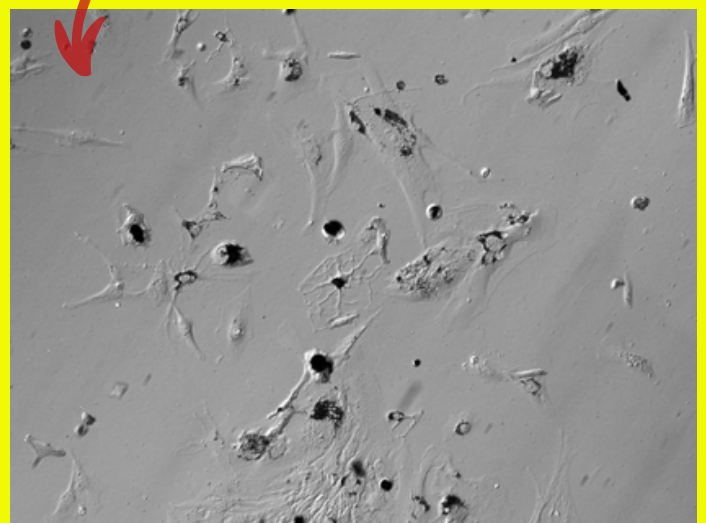
**Design** – Primary human endothelial cells and iris pigment epithelial cell were extracted from a 22 year old African American donor globe and cultured for one passage in respective media formulations. At 80% confluence, cells were passaged and  $5 \times 10^5$  cells were used to in the Atelerix CytoStor system as per manufacturers instructions. Cells were left for 72 hours at ambient temperature before release. Cells were released from the gel and plated in a T25 flask and allowed to adhere overnight. Cells were then imaged using brightfield microscopy.

**Results** – Cells showed good viability and regained their morphology rapidly with little apparent cell debris or loss of pigmentation.

Corneal Endothelial Cells



Iris Pigmented Epithelial Cells



“ I was amazed that these very fragile cells survived so well after being left over the weekend in CytoStor! Staggering!! ”

Dr James Foster, Scientific Director, Lions World Vision Institute