

## **Walter E. Washington Convention Center**

### **Level 1, 143C**

#### **Purpose**

To assess visual outcomes at distance, intermediate and near as well as glass independence after bilateral implantation of a new progressive apodized diffractive trifocal intraocular lens (IOL)

#### **Methods**

Eligible adult patients undergoing cataract surgery with bilateral implantation of the study IOL in a University Hospital were considered for inclusion. Exclusion criteria were the presence of other ocular pathologies or preoperative astigmatism >1.25 diopters (D). One month after surgery patients underwent: monocular and binocular uncorrected visual acuity (VA) for far (4 m), intermediate (60 cm) and near (33 cm) distances and. Patients completed a visual satisfaction questionnaire, including glass dependence for different activities, between 9 and 12 months after surgery.

#### **Results**

Thirty four eyes of seventeen patients aged 69,4 +/- 5,1 receiving bilateral implantation of the study IOL were analysed. Mean binocular uncorrected VA was 0.06 LogMAR for far, 0.16 for intermediate and 0.12 for near distances. All patients achieved a binocular uncorrected VA better than 0.3 LogMAR (20/40 Snellen equivalent) for distance and near vision and 94.8% of patients for intermediate vision. As regards patient-evaluated outcomes, only 1 patient (5.8%) had less than 0.2 UCDVA due to residual cylinder despite on axis incision in a preexisting astigmatism of 1.1 D. None of the patients required eye glass correction for any distance after surgery

#### **Conclusion**

The progressive apodized diffractive IOL provides excellent short-term visual outcomes, with good intermediate VA performance and excellent patient-reported satisfaction.