



## P5.22

### **Ologen implants as an adjuvant for revision surgery after failed trabeculectomy**

Panagiotis Kouros<sup>1</sup>, Cay Christian Loesche<sup>1</sup>, Zaher Sbeity<sup>1</sup>, Pat-Michael Palmiero<sup>2</sup>

<sup>1</sup>*Evangelic Hospital Mülheim, Department of Ophthalmology, University of Düsseldorf, Germany, Mülheim an der Ruhr - Germany,* <sup>2</sup>*Westchester Medical Center, New York Medical College, Department of Ophthalmology, Valhalla, USA, New York - USA*

**Purpose:** to evaluate the efficacy of Ologen Collagen Implants compared to antimetabolites as an adjuvant in revision surgery for failed trabeculectomy.

**Methods:** retrospective comparative case series. Thirty failing blebs underwent either needling with antimetabolites injections (Mitomycin C or 5-Fluorouracil; n = 15) or revision surgery with ologen (n = 15) as an adjuvant. The surgical outcome of both groups were analyzed and compared. Bleb morphology, intraocular pressure (IOP) and number of antiglaucoma medications in both groups were analyzed at 1 month, 3 months, and 6 months after surgery.

**Results:** The mean age of patients was  $72.5 \pm 10.3$  in the ologen group and  $66.8 \pm 11.9$  in the antimetabolite group respectively. The mean IOP before surgery was  $31.1 \pm 8.4$  in the ologen group and  $28.6 \pm 4.9$  in the antimetabolite group. In both groups, the mean IOP was significantly reduced after surgery (Student's t test,  $p \leq 0.01$ ). At six months the mean postoperative IOP was lower in the ologen group ( $14.5 \pm 4.9$ ) than in the antimetabolite group ( $18.7 \pm 5.9$ ) and the difference was not statistically significant (student's t-test p. 0.058). The number of antiglaucoma medications was also reduced in both groups 6 months postoperatively. Blebs in the antimetabolite group were less elevated and less vascularized. Four bleb leaks (24%) were seen in the ologen group with hypotony and were surgically repaired.

**Conclusion:** Bleb revision with ologen implant can lead to significant IOP reduction and improve surgical outcome.