

ONE-YEAR OUTCOMES OF A PROSPECTIVE RANDOMIZED TRIAL COMPARING INTRAOCULAR PRESSURE REDUCTION IN PHACOTRABECULECTOMY AUGMENTED WITH COLLAGEN MATRIX IMPLANTS (OLOGEN®) VERSUS MITOMYCIN C

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Purpose: To compare the efficacy and safety of collagen matrix implant (Ologen®; OLO) with mitomycin C (MMC) in phacotrabeculectomy. Methods: Prospective randomized comparative study of 30 eyes with primary open angle glaucoma (POAG) (18 eyes) and pseudoexfoliation (PEX) glaucoma (12 eyes) in the follow-up of one year. All patients were randomized and underwent phacotrabeculectomy augmented with OLO (15 eyes) or MMC (15 eyes). Main outcome measures: intraocular pressure (IOP), best corrected visual acuity (BCVA) in LogMAR scale, bleb evaluation on the Moorfields bleb grading system (MBGS), number of antiglaucoma medications, complications. Results: In the OLO group mean IOP decreased by 42.5% from a preoperative value 26.67 mmHg to 15.33 mmHg whereas, in the MMC group mean IOP decreased by 46.3% from 24.00 mmHg to 12.89 mmHg. In the OLO group mean BCVA after surgery improved from 0.47 to 0.26, whereas in the MMC group mean BCVA improved from 0.49 to 0.19 (LogMAR). There were no statistically significant intergroup differences with regard to IOP decrease and BCVA improvement. Using MBGS, at 12 months after surgery there were no statistical differences in area, height or vascularity between OLO and MMC group. Conclusions: OLO implant could be a new, safe and effective alternative to MMC with similar success rate at 12 months of follow-up. Financial Disclosure: Yes – Grant Support from Aeon Astron.