18 month outcome of xen45™ implant in primary open angle glaucoma and normal tension glaucoma with iol implantation

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Introduction: The aim was to support evidence on the safety and efficacy of XEN implant.

Methods: Subjects were 16 patients, 19 eyes with POAG (Primary Open Angle Glaucoma) and 2 with NTG (Normal Tension Glaucoma) treated with PhacoXEN or XEN implant. Outcome data for this study were collected retrospectively from EDMS (Electronic Document Management System) used as a main source. The implant insertions were performed by one surgeon in one hospital followed by a check-up after one week, one month, three months, six months, 12 months, and 18 months. The study focused on IOP reduction and the number of medications used before and after XEN45™ Implant insertion. IOP reduction of ≥20% at 18 months and complete elimination of medications was deemed to be successful.

Results: IOP dropped from 21.00 ± 5.33mmHg pre-operatively to 16.22 ± 5.18mmHg (19.54%), 15.65 ± 4.32mmHg (23.60%) and 15.54 ± 4.77mmHg (29.71%) in 6 months, 12 months and 18 months, respectively. There was a statistically significant reduction in IOP in 56% of eyes at 18 months. Mean number of medications decreased from 3.06 pre-implant to 0.80, 1.00 and 0.50 post implant in 6, 12 and 18 months respectively.

Discussion: This subconjunctival device provides a safe and efficient treatment of POAG by long-term IOP lowering. It significantly reduces the need for topical medication.