Novel ab-interno Minimally Invasive Glaucoma Surgery (MIGS)-The XEN45 microfistula

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Purpose: The aim of this study is to evaluate the effectiveness of the novel ab-interno MIGS fistula-XEN45 in reducing intraocular pressure (IOP) and glaucoma medication in patients with Open-Angle Glaucoma (OAG).

Patients and Methods: This is a multicenter, open-labeled prospective study, in which 76 patients with OAG were enrolled. Effectiveness was assessed by comparing baseline intraocular pressure values to postoperative values. Success criteria were classified according to the Tube vs Trab study. All patients underwent the ab-interno XEN45 procedure. The surgery was performed as a primary procedure, or in combination with cataract surgery.

Result: Mean IOP ranged from 22.44.7 preoperatively, to 13.18.0 postoperatively. Mean IOP lowering was 10.0 mmHg at 9 months of follow-up, a drop of 38%. Preoperative medication classes were 3.2, which shown a statistically significant decline to 0.4 postoperatively. Eighty eight percent (88%) of patients reached an IOP of 18mmHg or 20% drop, and 63% of patients reached an IOP of 16 or 30% drop.

Conclusion: The novel XEN45 MIGS implant, has proven to be effective for Glaucoma in a MIGS approach. Intraocular pressure dropped by more than 30%, and was 18, in almost 90% of the patients who were evaluated at last follow-up. The XEN45 showed a statistically significant decline in the amount of glaucoma medication classes used, from 3.2 to 0.4. The goal of this study is to investigate a larger number of patients over a longer follow-up period (up to 3 years).

Biography
Shoham-Hazon has completed an Ophthalmology residency in Israel, in January 2010. During his residency he was appointed chief resident and was awarded two resident awards of excellence. Thereafter, Shoham-Hazon pursued the lucrative fellowship at the University of Toronto, with the world renowned, Ile Ahmed. This three year fellowship included clinical, surgical and research aspects of Glaucoma, Advanced Anterior Segment & IOL surgery (GAASS). During this fellowship, Shoham-Hazon received numerous awards for presentations in international conferences and research grants for research studies. Shoham-Hazon is a reviewer and guest reviewer for various international peer-review journals.

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