

Intermediate-Term Results of Ab Interno Trabeculotomy Compared with Trabecular Microbypass Stent, Both with Cataract Surgery

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Financial Disclosures

Dr. Mosaed: Alcon Laboratories, Inc., B, E

Dr. Yomtoob: Alcon Laboratories, Inc., B; Glaukos Corporation, D

Purpose

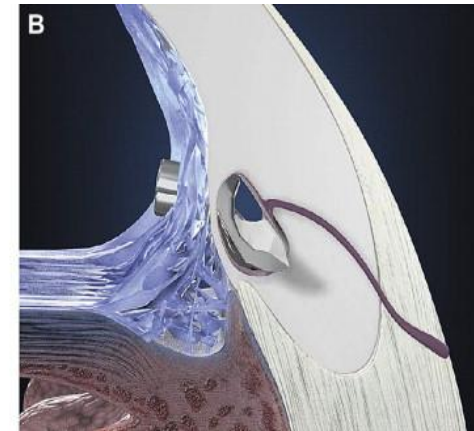
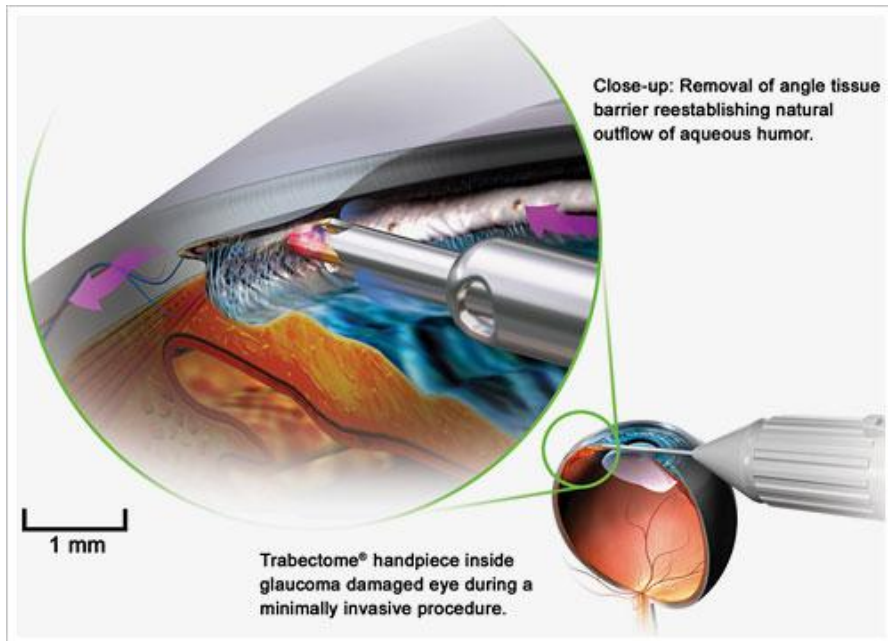
**To compare the outcomes of two minimally-invasive
glaucoma procedures with combined cataract
extraction using the Trabectome system and
iStent implant.**

(Neomedix Inc., Tustin, CA, USA)

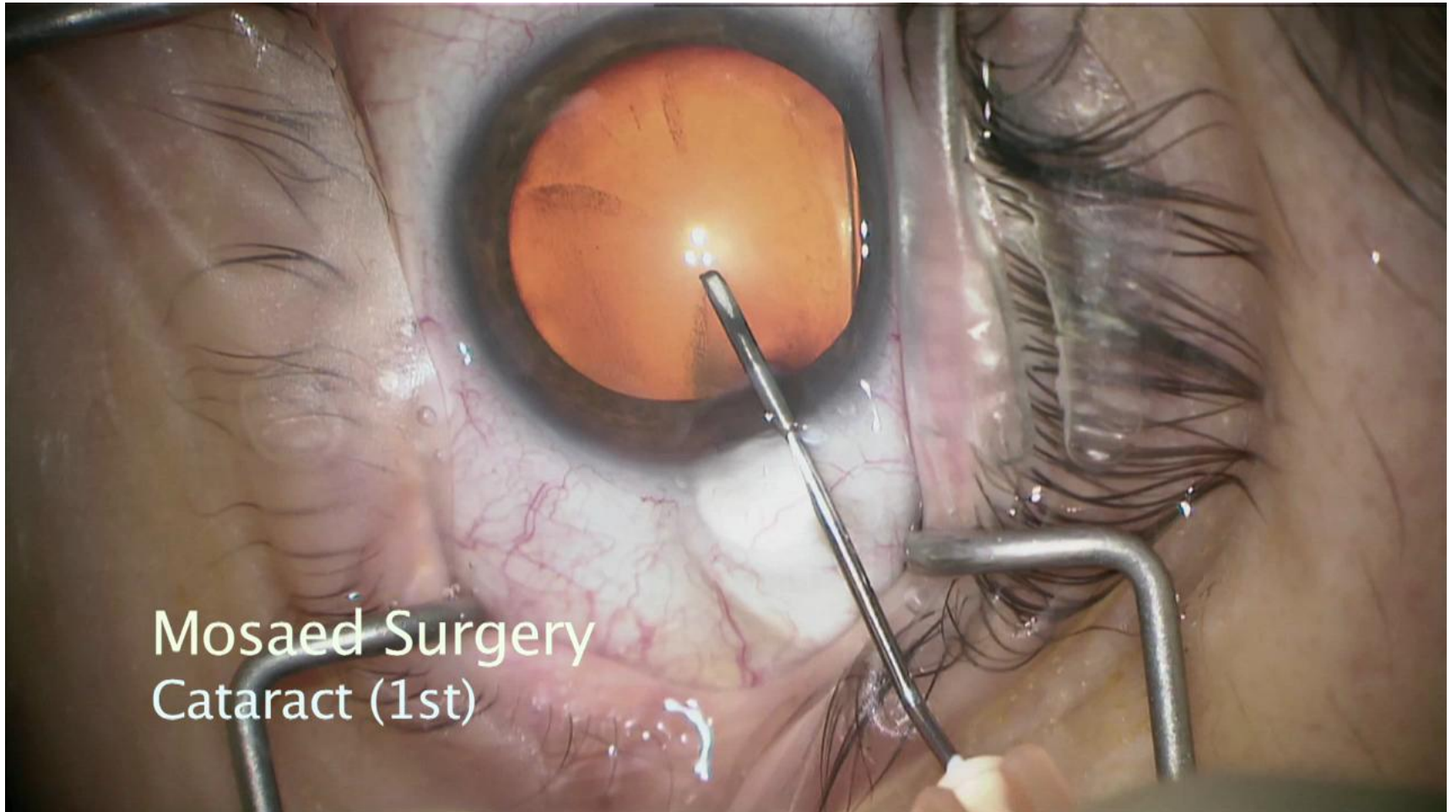
(Glaukos Corporation, Laguna Hills, CA, USA)

Introduction

- **MIGS surgery is a broad category of glaucoma treatment seeking to enhance outflow through natural pathways**
- **Trabectome™ and iStent™ are two FDA approved varieties which can be combined with cataract surgery**



Introduction



Mosaed Surgery
Cataract (1st)

Methods

- Retrospective review of Trabectome™ versus trabecular micro-bypass stenting using the iStent™ with combined cataract surgery.
- All cases had at least 6-month follow-up.
- Trabectome™ N=42 eyes (36 patients), iStent™ N=39 eyes (29 patients)
- Main outcome measures: intraocular pressure (IOP) and number of glaucoma medications.
- Survival analysis was performed, defining success as \geq 20% reduction in IOP, with IOP < 21 in at least 2 follow up visits

Results

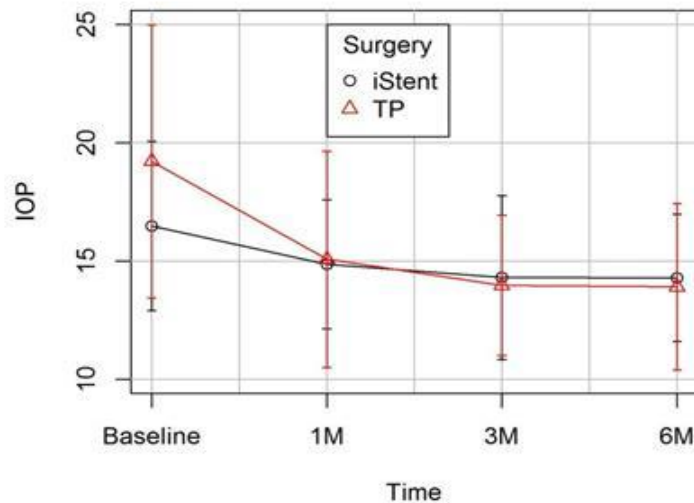
Trabectome™ group

- Preop IOP 19.2±5.8 mmHg; Postop IOP 13.9±1.4 mmHg;
Mean IOP reduction 5.9+/-5.2mmHg (30.7%)

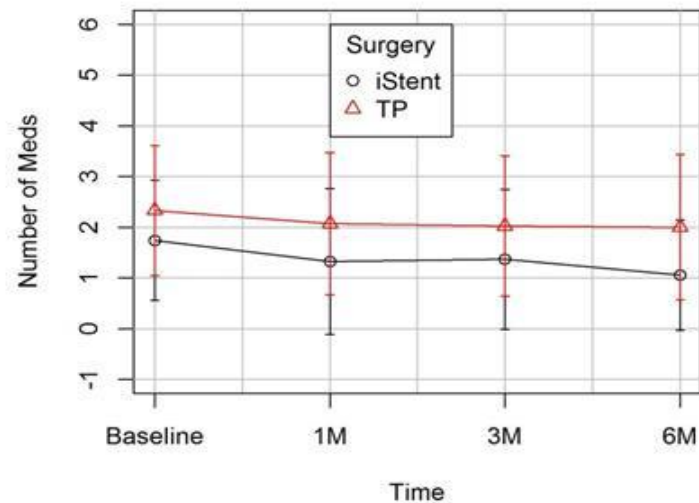
iStent™ group

- Preop IOP 16.5±3.6 mmHg; Postop IOP 14.3±2.7;
Mean IOP reduction 2.3+/-3.4mmHg (13.9%)

IOP Plot by Surgery

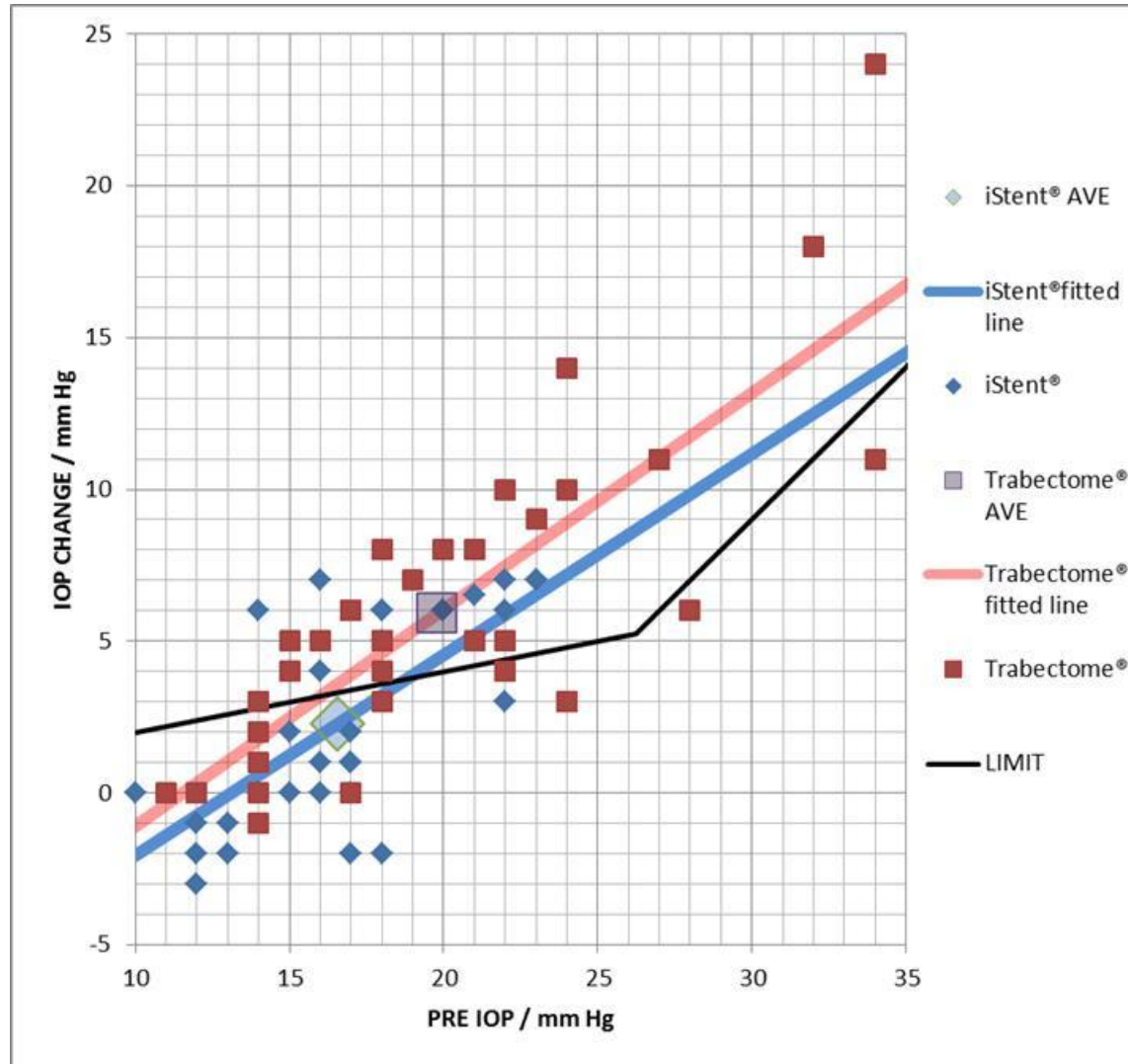


Meds Plot by Surgery



iStent	16.5±3.6	14.9±2.7	14.3±3.5	14.3±2.7	iStent	1.7±1.2	1.3±1.4	1.4±1.4	1.1±1.1
TP	19.2±5.8	15.1±4.6	14.0±3.0	13.9±3.5	TP	2.3±1.3	2.1±1.4	2.0±1.4	2.0±1.4

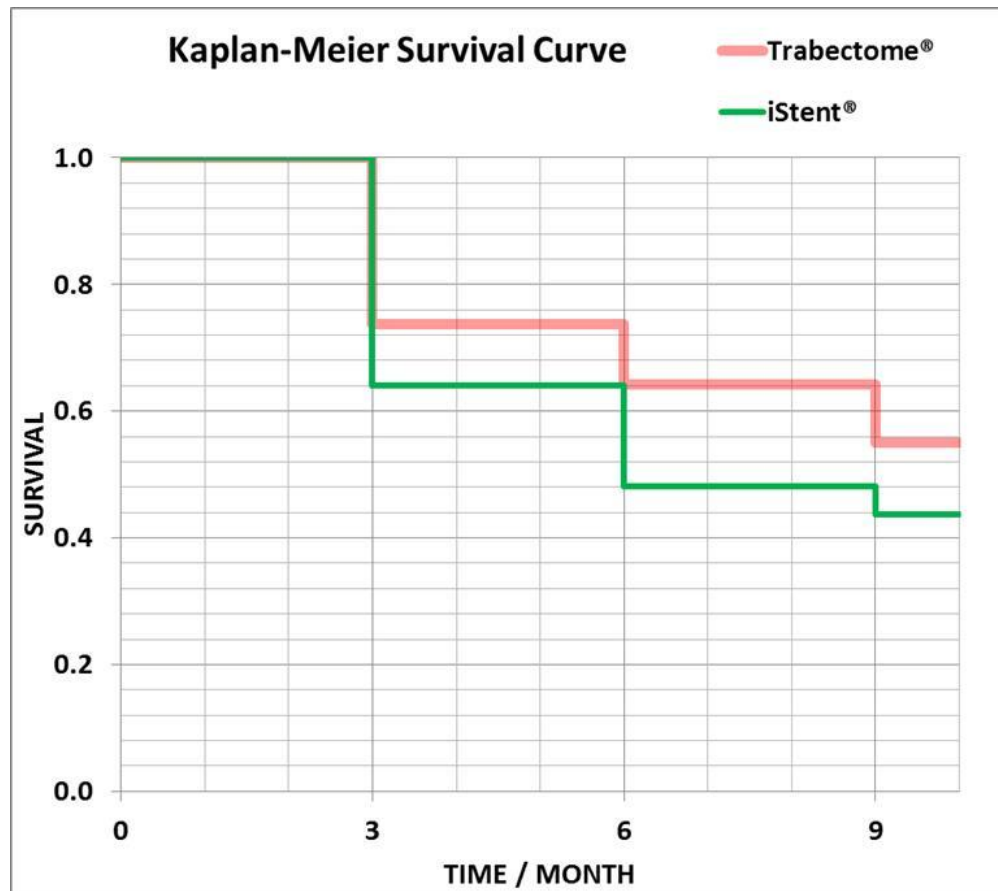
Results



Kaplan Meier Success Rate

Trabectome™ 76% at 6 months

iStent™ 48% at 6 months



Conclusion

Trabectome™ or iStent™ with combined cataract surgery both achieve reduction in IOP and drug burden.

Trabectome™ combined with cataract surgery achieved a greater reduction in IOP and a higher rate of success than iStent™ with cataract surgery

A randomized, prospective study with larger sample size and longer follow up may provide more insight into subgroups that respond better to each treatment