



How to Successfully Implement Standalone MIGS in Your Practice

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Traditionally, the downsides of topical glaucoma drops—such as poor compliance and side effects—were rarely discussed, as the only alternative was highly invasive surgery. Minimally invasive glaucoma surgery (MIGS) at the time of cataract surgery has reframed this conversation, increasing our understanding of the significant burden topical drops place on patients and returning control to physicians. However, it's essential to maintain an interventional mindset and recognize that many glaucoma patients are not candidates for cataract surgery or have already had it.

The OMNI® Surgical System by Sight Sciences® enables a viable approach (OMNI procedure) to lower intraocular pressure (IOP), allowing us to address all three known areas of resistance in the aqueous outflow system (trabecular meshwork, Schlemm's canal, and the collector channels) in a comprehensive, safe, and durable procedure, with no implant left behind.

I started using the OMNI technology when it was introduced back in 2018. Initially, I only used it in conjunction with cataract surgery, and as I experienced its benefits and versatility, I started to perform the procedure standalone (without cataract surgery). In this article, I will share how I have successfully implemented the OMNI procedure as a standalone procedure and the results I have observed.

When to Use OMNI

Don't Just Add a Medication: I most frequently utilize the OMNI Surgical System for patients whose existing medication regime is insufficient and requires escalation of treatment. For those with rising pressure, I inform them that instead of adding an additional hypotensive medication we can offer an alternative mode of therapy uniquely enabled with the OMNI Surgical System.

Managing Progressive Glaucoma: I also turn to the OMNI procedure for patients experiencing glaucoma progression despite seemingly controlled IOP. These patients may be non-compliant with their medications, have missed IOP fluctuations outside the clinical setting, or where the IOP reductions with drops do not reach the desired target pressure. In these cases, I recommend an interventional approach, emphasizing that the OMNI procedure is a safe, effective, and durable option to treat glaucoma.

When SLT is not Enough: Patients who choose SLT are typically highly motivated to avoid eye drop treatment. For those patients in whom SLT was either not efficacious enough or did not have a durable effect, I offer the OMNI procedure as the next treatment option.

Patient Education: Worth the Extra Chair Time

Instead of categorizing patients as likely or unlikely to accept intervention, I make it a point to educate every patient about their available treatment options, including the OMNI procedure as a standalone treatment. Investing a bit more chair time in patient education often yields more informed decisions, happier patients, and better long-term outcomes.

Many stable glaucoma patients are on multiple medications, and it's an opportunity to ask them about their comfort level with their medication regimen. Do their eyes sting or burn? Are there dry eye signs and symptoms? How difficult or time-consuming is it to administer the medications? Many patients who may have controlled glaucoma on medication find the daily drops a burden for many reasons and welcome my recommendation of a standalone OMNI procedure to potentially reduce eye drop burden.

I often have these conversations with my pseudophakic patients. They understand that, since they've already undergone cataract surgery, they can expect a similar smooth experience with a quick recovery and minimal disruption to their daily lives.

Communicating the OMNI Procedure Benefits to the Patient

When a patient's medication fails to control their IOP, I recommend considering additional treatment options. I typically suggest two approaches: adding another medication or performing an interventional procedure. Depending on the patient's ocular history, I may recommend selective laser trabeculoplasty (SLT) or a minimally invasive surgery, such as the OMNI procedure.

I explain to my patients that the OMNI procedure is an intervention that could result in better IOP control and potentially the need for fewer daily topical glaucoma medications. I explain in layman terms that with the OMNI procedure, we dilate the drain of the eye, flush out (or "clean") the drainage system, and widen the drain. They like the restorative nature of the treatment, and also like that the procedure does not involve an implant in their eye. They are reassured to hear that this procedure is less traumatic to ocular tissues and consists of a rapid recovery time.

Some of my patients undergo the procedure without sedation (local anesthesia alone). In general, most patients appreciate that I give an alternative option to adding more eye drops, and I allow them to make an informed decision without a feeling of being pushed into doing something they may not want to. Surprisingly, a significant number of patients choose minimally invasive surgical options such as the OMNI procedure over adding more medication, indicating many patients are unhappy with eye drops and do not want to increase their eye drop burden.

Suboptimal medication compliance is rampant with glaucoma therapy and increases the risk of disease progression. With the addition of each new medication, compliance decreases, and ocular discomfort increases.

Despite knowing that suboptimal compliance leads to progressive glaucoma disease in most patients, physicians are stuck in the habit of adding glaucoma medications rather than presenting patients with another option. I recommend that all eye doctors should provide an interventional approach such as the OMNI as an alternative to adding more eye drops, especially in the setting of suboptimal compliance, ocular surface disease, or in those with difficulty obtaining medication in a timely manner due to cost or access issues.

Risk Considerations

OMNI enables a minimally invasive procedure that is durable, suture-less, and with associated rapid visual recovery. I advise patients about some potential risks, including hyphema. I explain to them that hyphema is uncommon, and if it does occur, it almost always is transient and self-limited. It's important for surgeons to leave the IOP high at the end of the surgical procedure to reduce the incidence of post-operative hyphema. By doing so, we can help ensure a smoother recovery for our patients.

Surgical Tips and Keys to Success

I aim to dilate and surgically treat between 4 to 6 clock hours in Schlemm's canal; this is sufficient for most patients and minimizes the risk of complications, such as hyphema. Based on my results with the OMNI procedure and other studies, it is reasonable to assume that the OMNI technology is able to predictably deliver postoperative mean IOP in the low to mid-teens, irrespective of disease stage.¹

For milder stage of glaucoma, the OMNI procedure may often allow both reduction of IOP and discontinuation of medications. Those with moderate to advanced glaucoma will typically have drop burden reduction but not complete cessation of medications. My clinical preference is first to discontinue prostaglandins, which can be inflammatory, and leave the patient on an aqueous suppressant. In cases of severe glaucoma, I don't stop glaucoma medications and use the OMNI procedure to lower IOP as much as possible.

Conclusion

As the field of glaucoma treatment continues to evolve, the procedure enabled with the OMNI Surgical System stands out as a versatile, safe, and durable solution for managing glaucoma across the spectrum of glaucoma disease.¹ By integrating the OMNI procedure into practice, we can offer patients an alternative to polypharmacy, improving the glaucoma treatment experience and enhancing overall quality of life. The standalone OMNI procedure is particularly beneficial for patients who struggle with medication compliance or have insufficient medicated IOP control.

The following case studies illustrate the practical application of the OMNI procedure in different scenarios, highlighting its potential benefits and demonstrating its role in advancing patient care.

Case Study: Mild Glaucoma

A male in his mid-60s came to me for a second opinion. He was already diagnosed with mild primary open angle glaucoma and had dense trabecular meshwork pigmentation suggestive of an exfoliative component to his disease. He took two hypotensive medications, yet his IOP remained around 30 mmHg. Another physician had recommended a tube shunt procedure. Upon evaluating his condition, I offered a minimally invasive alternative, which I felt would work well in the setting of mild disease stage. I performed the OMNI procedure as a standalone treatment, significantly reducing his IOP to 17 mmHg. Furthermore, we decreased his medication load to just one topical agent. I advised him that at some point in the future, if IOPs rise, we may need to consider a tube shunt but that we could monitor him every 3-4 months. He is now four years out and doing well.

Case Study: Moderate Glaucoma

A 68-year-old pseudophakic female with a history of selective laser trabeculoplasty (SLT) was under treatment with latanoprost and timolol. Despite this regimen, her IOP was 20 mmHg, and she exhibited a superonasal field

defect indicative of moderate stage primary open angle glaucoma. Instead of modifying her medication schedule, I recommended the option of the OMNI procedure. She was immediately receptive as she vocalized her challenges with obtaining and self-administering her glaucoma drops. I performed OMNI as a standalone intervention, which resulted in her IOP dropping to 15 mmHg. Moreover, she was able to discontinue latanoprost, leaving her on timolol monotherapy.

Case Study: Dry Eye and Medication

An 80-year-old female with mild primary open angle glaucoma on a regimen of latanoprost and Cosopt exhibited chronic eye redness and used topical cyclosporine and artificial tears to manage dry eye symptoms. She had active ocular discomfort and worsening dry eye symptoms. I informed her that a minimally invasive OMNI procedure could improve her eye's drainage system, possibly reducing her medication burden and alleviate the dry eye symptoms associated with the medication use. She was eager to pursue this option and was appreciative that someone had finally offered an alternative to daily medication. After undergoing the OMNI procedure, we successfully discontinued latanoprost and switched the Cosopt to Timolol once daily, increasing the patient's ocular comfort and satisfaction with her glaucoma treatment regimen.



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REFERENCES

1. Yadgarov A. et al., Real-World Outcomes of Canaloplasty and Trabeculotomy Combined with Cataract Surgery in Eyes with All Stages of Open-Angle Glaucoma. *Clinical Ophthalmology* 2023;17 2609-2617

IMPORTANT PRODUCT INFORMATION

Indications for Use: The OMNI Surgical System is indicated for canaloplasty (microcatheterization and transluminal viscodilation of Schlemm's canal) followed by trabeculotomy (cutting of trabecular meshwork) to reduce intraocular pressure in adult patients with primary open-angle glaucoma. Contraindications: Do not use the OMNI in any situations where the iridocorneal angle is compromised or has been damaged (e.g., from trauma or surgery), since it may not be possible to visualize the angle or to properly pass the microcatheter. Do not use the OMNI in patients with angle recession; neovascular glaucoma; chronic angle closure; narrow-angle glaucoma; traumatic or malignant glaucoma; or narrow inlet canals with plateau iris. Do not use the OMNI Surgical System in quadrants with previous MIGS implants. Please visit omnisurgical.com/ifu for the full instructions for use, warnings, precautions, and adverse event information. Email us at glaucoma@sightsciences.com for additional information.



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