Nine Reasons Why We Perform MIGS with OMNI



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The OMNI[®] Surgical System shifts MIGS procedures to a patient-centered approach in the treatment of glaucoma.

NEDA SHAMIE, MD; PHILIP NGAI, MD, MS, MBA; AND NOUREEN KHAN, MD

n a recent presentation, three glaucoma experts discussed why they implemented the OMNI Surgical System (Sight Sciences; Figure 1) in their practices. They identified nine compelling reasons why the OMNI technology adds value to their practices while offering their patients a welcome alternative to medication management and minimally invasive treatment options.

REASON 1: THREE POINTS ADDRESSED Philip Ngai, MD, MS, MBA: The OMNI

technology uniquely addresses all three known points of resistance in the aqueous outflow system. It is the only MIGS device capable of addressing the trabecular meshwork, Schlemm's canal, and the distal collector channels at the same time. Because there is no practical way of diagnosing the location of the resistance in the conventional outflow pathway, addressing all three points of outflow resistance increases the odds of successfully lowering IOP with a single procedure.

REASON 2: ELEGANT TECHNOLOGY

Neda Shamie, MD: The OMNI Surgical System is an implant-free, MIGS technology indicated to treat primary open-angle glaucoma (POAG) via canaloplasty followed by trabeculotomy. The device combines these two functions into one elegant procedure. With the handheld device, the surgeon traverses the anterior segment, inserts the microcatheter into the Schlemm's canal, and performs manual dilation (Figure 2). Then, the surgeon may deliver a controlled amount of viscoelastic through the microcatheter to further remove resistance within Schlemm's canal and the collector channels. He or she performs the trabeculotomy by reinserting the microcatheter and then pulling back on the handpiece.

REASON 3: SOLO OR IN COMBINATION

Noureen Khan, MD: OMNI can be used as a standalone option or in combination with cataract surgery. This versatility provides advantages for us as surgeons and for our patients. There is a large population (85%) of primary open-angle glaucoma patients who don't yet need cataract surgery,¹ and these individuals can benefit from a short and safe procedure that lowers their IOP. For those who have already received cataract surgery, the OMNI procedure is a minimally invasive procedure that offers the potential to reduce their dependence on IOP-lowering medications while enjoying quick recovery times and an attractive safety profile.

REASON 4: VERSATILITY

Dr. Shamie: OMNI is a versatile technology that can be used at any stage of glaucoma. The procedure is customizable—the surgeon can tailor it to the needs of each particular eye. Its unique 360° access to the diseased conventional outflow pathway, in combination with its ability to address all three points of resistance, makes the procedure with OMNI ideal for treating a range of disease severity.

REASON 5: ERGONOMICS

Dr. Khan: The OMNI Surgical System is well-designed, ergonomic, and intuitive. The design of the Ergo-Series device maximizes ergonomics and surgical ease of use. Its beveled cannula tip allows for gentle and precise access into Schlemm canal to create a precise otomy. The finger wheel, which advances the microcatheter, has enhanced prominence and wider ridges for improved tactile feel. In addition, the textured handle gives the surgeon a comfortable and secure grip during procedures. Finally, OMNI has a priming feature that allows for an easy attachment of the OVD-containing cartridge directly to the device. The OVD is then dispensed from an internal reservoir during the surgery, saving time and enhancing efficiency.

REASON 6: IMPLANT-FREE

Dr. Shamie: The OMNI Surgical System offers a MIGS procedure that is



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2 SCHLEMM'S CANAL DISTAL COLLECTOR CHANNELS			
	Trabecular Meshwork	Schlemm's Canal	Collector Channels
Trabecular Bypass Stents	0		
Canaloplasty		0	\bigcirc
Trabeculotomy	\bigcirc		
OMNI OMNI	0	Ø	0

Figure 2. The OMNI Surgical System addresses all three known points of resistance in the aqueous outflow system.

implant-free and has been proven safe and effective.² The ROMEO extension study published in 2023 was designed to provide safety and effectiveness at 24 months postoperatively for two cohorts: canaloplasty followed by trabeculotomy in combination with cataract surgery and standalone canaloplasty followed by trabeculotomy in pseudophakic patients.³ The proportion of total patients at 2 years who met the primary success criteria (either a \geq 20% IOP reduction or IOP between 6 and 18 mm Hg and no increase in medication or SSI) was 75%; the proportion of patients who met the success criteria and who either had cataract surgery plus OMNI or OMNI as a standalone procedure was 72.1% and 79.3%, respectively. Additionally, 33.3% of patients were medication-free at two years.³

REASON 7: FEWER DROPS

Dr. Ngai: The OMNI Surgical System may reduce or eliminate patients' dependence on topical IOP drop therapy. This potential benefit alleviates (or eliminates) the risk of patients' nonadherence, and it generally makes for happy patients. In 2022, investigators in the GEMINI study evaluated the combined use of the OMNI Surgical System during cataract surgery on IOP and IOP-lowering medication use. At 12 months, 76% of the eyes had an IOP of between 6 and 18 mm Hg, 84.2% of the eyes achieved an IOP reduction of >20% from baseline, and 80% were free of IOP-lowering medications. Moreover, the investigators reported very few adverse events.² These impressive data give me the confidence that I am making a difference in my patients' lives.

Dr. Khan: The potential to reduce drop burden is a huge benefit for our patients. With all of the available minimally invasive glaucoma procedures to reduce pressure and lower drop burden, this should encourage a shift in surgeons' mindsets on how to care for glaucoma patients: early in the disease progression.

IMPORTANT SAFETY 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. **REASON 8: SMOOTH RECOVERY**

Dr. Ngai: Postoperative care after the OMNI procedure is like standard cataract surgery. Expectations for a smooth recovery may be challenging to maintain with traditional glaucoma procedures. However, MIGS performed with OMNI has a predictably smooth recovery process, even for challenging cases. When conditions such as hyperemia, a systemic inflammatory disease, or narrow eyelid fissures present challenges that may cause surgeons to hesitate to use conjunctival-based glaucoma procedures, surgery with OMNI is an excellent option.

REASON 9: FUTURE OPTIONS

Dr. Khan: As we know, glaucoma management is a journey. The OMNI Surgical System does not preclude us from performing more advanced glaucoma procedures should they be needed in the future. This flexibility offers options to our patients that may not have been available before, and it can expand the scope of our practices and the value we can provide to our patients. By intervening early and using the OMNI to achieve meaningful IOP reduction, we surgeons can significantly impact the burden of future medical therapies, potentially decrease disease progression, potentially reduce drop noncompliance, and offer significant value to our patients.

 Kwon H. Y, Fingert H. J, Greenlee C. E. Chapter 2: Epidemiology of glaucoma. In: A Patient's Guide to Glaucoma. FEP International; 2008:11-18.
Callardo MJ, Pyfer MF, Vold SD, et al. Canaloplasty and Trabeculotomy Combined with Phaceemulsification for Glaucoma: 12-Month Results of the GEMINI Study. *Clinical Ophthalmology*. 2022:Volume 16:1225-1234. doi:10.2147/0PTH.S362932
Williamson BK, Vold SD, Campbell A, et al. Canaloplasty and Trabeculotomy with the OMNI System in Patients with Open-Angle Glaucoma: Two-Year Results from the ROMED Study. *Clinical Ophthalmology*. 2023/Volume 17:1057-1066. doi:10.2147/0PTH.S407918

NEDA SHAMIE, MD

- Partner, Maloney-Shamie Vision Institute, Los Angeles
- Clinical Professor of Ophthalmology, Keck School of Medicine, University of Southern California, Los Angeles
- Member, CRST Editorial Advisory Board
- ns@maloneyshamie.com
- Financial disclosures: None acknowledged

PHILIP NGAI, MD, MS, MBA

- = Founder, San Gabriel Valley Eye Institute, San Gabriel Valley Eye Group, Sequoia Eye Group
- philipngaimd@gmail.com
- Financial disclosures: Consultant (Ivantis, Sight Sciences, Twenty-Twenty)

NOUREEN KHAN, MD

CONTRAINDICATIONS: Do not use the OMNI Surgical System 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 Surgical System in patients with angle recession: neovascular

glaucoma; chronic angle closure; narrow-angle glaucoma; traumatic or malignant

- Partner, Northern Virginia Ophthalmology Associates, Fairfax, Virginia
- Director of Clinical Research, Northern Virginia Ophthalmology Associates
- noureen.khan@nvoaeyes.com
- Financial disclosures: Sight Sciences, JelliSee Ophthalmics

Watch this and other conversations



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.

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