Drs. Thimons and Noecker discussed innovations and new directions for glaucoma treatment.

**Catching Up to the Silent Thief**

New drugs, technologies and awareness can bring ODs to higher levels in diagnosing and treating glaucoma.

On Thursday morning, two leading experts in glaucoma treatment and surgery, James Thimons, OD, and Robert Noecker, MD, shared the stage to discuss why 2017 was one of the most exciting and innovative years in the recent history of glaucoma care.

In the “Gear Up for Glaucoma” lecture, Dr. Thimons noted that two new drugs came out in 2017, the first time new drugs have been released in 21 years. The discussion delved deep into the next generation of therapeutics, the evolving science of surgical intervention, including minimally invasive glaucoma surgeries (MIGS), and the technologies optometrists can use for earlier detection and management of glaucoma.

**OCT for the OD**

“The earlier we can identify it, the earlier we can treat it, and there’s no question that earlier intervention in glaucoma does save sight over time,” said Dr. Thimons, making it essential that ODs not only have the technology in their offices to detect disease early, but that they’re also keen to use it. “OCT is the window to the brain and almost as good as MRI in the early identification of the disease state. It takes us to a completely different level of expertise,” added Dr. Thimons.

Both doctors agreed that ganglion cell analysis through OCT is the frontier of early glaucoma diagnosis. “While it used to be state-of-the-art care, you look at the ubiquity of the OCT machine now—a clinically useful tool that we rely
on for our clinical exams and for decision making—so yes, along with visual field testing, OCT testing has become standard of care,” said Dr. Noecker.

**Outside Office Hours**

From there, the discussion turned to a handful of newly approved technologies that are changing the face of glaucoma management, such as adding the potential for 24-hour intraocular pressure (IOP) monitoring into the approach to management. One device, the iCare home tonometer, allows doctors to have IOP data throughout the day, even beyond office hours.

Knowing that peak IOPs do not occur between the hours of 9am and 5pm, optometrists can now tap into possible missing links that could radically alter the management approach, the speakers said.

Dr. Thimons, who has rented the home tonometer to more than 45 of his patients since its FDA approval last spring, has found the data output for late evening and early morning pressure readings to be fascinating. “I’d say 30% to 40% of these patients have a 5mm Hg difference between my highest IOP recording and what they found off-office hours from the device,” he said. Dr. Noecker said he does receive the occasional late-night call from patients who panic after seeing a high reading in the middle of the night; however, he said this can be avoided by simply engaging in a few extra minutes of patient education around IOP results.

**Hysteresis Hysteria**

For the last five years, Drs. Thimons and Noecker have been using the Ocular Response Analyzer (Reichert) to assess corneal hysteresis to further inform the direction for glaucoma management. “This provides the type of information that really yields high return in looking at prediction for progression within existent glaucoma patients,” said Dr. Thimons.

According to Dr. Noecker, when he doesn’t have the corneal hysteresis reading, he really misses it. “It’s a step up from pachymetry, a more sophisticated measure and more reliable, so in some ways, I use it to see how good a job we’re doing; you can see the hysteresis rise when you treat appropriately,” said Dr. Noecker. Because visibly positive feedback can be rare in many of these interventions, this data adds a necessary slice of positivity to the process.

**New Digs: MIGS**

In the final part of the presentation, Drs. Noecker and Thimons explored some of the latest, real-time results trickling in from the use of the newest drugs on the market—Rhopressa (Aerie Pharmaceuticals) and Vyzulta (Bausch + Lomb)—as well as the newest frontiers in MIGS. Dr. Noecker said that in combining two or three MIGS for one patient, he has come across impressively positive results. And while he’s seen varying success with lowering IOP across these procedures, the greatest triumph lies in the breadth of options.

According to Dr. Thimons, glaucoma treatment was once “drops and laser and then trabeculectomy, with a gigantic space in between.” Now, however, we “have minimally eight, maybe 10 procedures in the middle of that, each of which gives you a different risk pattern, a different IOP endpoint that you can drive to, and we’re seeing remarkable results, like patients dropping into the low teens and staying there for years without drops.”

In closing, the message was clear: thanks to new technologies and surgical procedures, we are on the horizon of revolutionizing the course of glaucoma.